STRAITS SETTLEMENTS.

ANNUAL REPORT
ON THE
MEDICAL DEPARTMENT
FOR THE YEAR
1925

London School of Hygiene & Tropical Medicine
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BY

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DIEU ET MON DROIT

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The Straits Settlements Medical Report for the year 1925.

I.—ADMINISTRATION.

(*a*) STAFF.

The Authorised European Staff was 108. Details are given in Table *I*.

2. Dr. H. G. Holdbrook was appointed Chief Medical Officer, Malacca, and assumed duty on October 11, 1925.

Mr. A. Dickson Wright, M.S., F.R.C.S., acted as Professor of Surgery from 19th April, 1925, *vice* Mr. K. Black, F.R.C.S., on leave.

3. The following officers were seconded or transferred during the year:—

Name.	*To.*	*Date.*
1. J. Portelli ...	Kedah as Medical Officer	20-1-1925.
2. L. W. Evans ...	Kelantan as Residency Surgeon	14-3-1925.
3. G. Fraser Smith ...	Johore as Medical Officer	6-7-1925.
4. N. H. Harrison ...	Trengganu as Medical Officer in charge ...	11-9-1925.
5. A. B. Jesser Coope ...	Johore as Medical Officer	30-10-1925.

4. The following officers proceeded on leave during the year:—

Name.	*Appointment.*	*Date.*
Dr. W. M. Chambers ..	Medical Officer ...	13th March, 1925.
Dr. J. C. Tull ...	Pathologist, Penang ...	18th March, 1925.
Dr. N. G. Cooper ...	Health Officer ...	8th April, 1925.
Mr. J. W. Haddon ...	Deputy Analyst ...	11th April, 1925.
Mr. K. Black ...	Professor of Surgery ...	19th April, 1925.
Mr. H. L. Hosking ...	Financial Officer, Hospitals	1st June, 1925.
Dr. L. S. O'May ...	Lady Medical Officer ...	17th June, 1925.
Dr. E. R. Stone ...	Medical Superintendent, Lunatic Asylum ...	3rd July, 1925.
Dr. J. S. Webster ...	Professor of Medicine ...	1st November, 1925.
Dr. S. Winstedt ...	Lady Medical Officer ...	18th December, 1925.

5. The following officers returned from leave during the year:—

Name.	*Appointment.*	*Date.*
Dr. H. B. Dodds ...	Medical Officer ...	16th January, 1925.
Dr. A. L. Murison ...	Medical Officer ...	28th February, 1925.
Dr. R. B. MacGregor	Medical Officer ...	28th February, 1925.
Dr. N. H. Harrison ...	Medical Officer ...	29th August, 1925.
Dr. H. G. Holdbrook	Chief Medical Officer, Malacca	11th October, 1925.
Dr. J. C. Tull ...	Pathologist, Penang ...	2nd December, 1925.
Mr. J. W. Haddon ...	Deputy Analyst ...	3rd December, 1925.

6. The resignation of Dr. G. F. Fraser Smith was accepted on 6th October, 1925.

7. The Principal Civil Medical Officer, Dr. A. L. Hoops, left for Japan on 21st September, as a Vice-President of and delegate to the VI Congress of the Far Eastern Association of Tropical Medicine, Tokyo. At the conclusion of the Congress he represented the Government of the Straits Settlements in the five weeks study tour for Health Officers organised by the League of Nations and the Japanese Government in Japan, Korea and Manchuria. He returned to Singapore on 23rd December, 1925.

During his absence Dr. J. Gray, Chief Medical Officer, Singapore, acted for him: Dr. R. B. MacGregor acted for Dr. Gray.

Dr. J. S. Webster, Professor of Medicine, also left Singapore on 23rd September, 1925, to attend the Tokyo Congress as a representative of the Straits Settlements. On the conclusion of the Congress, 1st November, 1925, he proceeded direct on leave from Japan. Dr. J. Tull was appointed to act for him.

(*b*) THE FOLLOWING ORDINANCES AFFECTING PUBLIC HEALTH, WERE ENACTED DURING THE YEAR.

1. An Ordinance to amend Ordinance No. 124, The Deleterious Drugs Ordinance.

The object of this Bill is to amend our law relating to the abuse of Deleterious Drugs so as to bring it into line with existing legislation upon the subject in England. The Bill substantially incorporates in our law the amendments to the Dangerous Drugs Act, 1920, contained in the amending Act of 1923.

The chief points in the Bill are the increased restrictions upon the sale of deleterious drugs and syringes, the power to seize books and documents, and a great increase in the fines prescribed.

2. An Ordinance to amend Ordinance 197 Kwong Wai-Shiu Hospital.

The hospital referred to is a large non-Government Hospital supported and run by a corporation of the Cantonese Chinese Community of Singapore.

The amendment gave the corporation power to erect buildings.

3. An Ordinance to amend Ordinance 157, Quarantine and Prevention of Disease.

The amendment gives power to the master of any ship lying within the waters of the Colony, but outside port limits, and coming from a suspected or infected port, or having or having had a case of infectious disease since leaving such port—

(*a*) to prevent any person from disembarking from such ship;

(*b*) to detain any person boarding such ship without permission from the Port Health Officer;

(*c*) to deliver any person detained to the Port Health Officer.

No person may disembark from or board such ship without permission from the Port Health Officer.

(c) FINANCIAL.

The actual medical and sanitary expenditure and the revenue collected in the various Settlements were :—

1925.

EXPENDITURE.

(*Personal Emoluments, Hospitals Board, etc.*).

	$ c.
Singapore	1,631,023 31
Penang	775,164 09
Malacca	227,551 64
Labuan	17,424 47
Total ...	$2,651,163 51

1925.

REVENUE.

(*Hospitals Board, Medical General, Health, Analysts, and Lepers*).

	$ c.
Singapore	342,368 90
Penang	235,073 00
Malacca	13,677 18
Labuan	1,557 25
Total ...	$592,676 33

Of the expenditure, $618,642 was spent on the Health Branch, and $83,273.73 on the College of Medicine.

It is to be remembered that in addition to the above, the Health Services of the Municipalities spent—

	$ c.
Singapore	469,678 03
Penang	131,416 00
Malacca	13,928 00
Total ...	$615,022 03

The total revenue of the Colony was $35,156,135.

Further particulars are given in Table *II*.

II.—PUBLIC HEALTH.

(*a*) General Remarks :—

As usual the cooler months of the first quarter were the healthiest months of the year : in these months the deaths from Malaria, Pulmonary Tuberculosis and Pneumonia are at a minimum : the smallest number of deaths in any one month was 1857 in February. The second quarter is sometimes the most unhealthy, especially in Singapore, owing to the damp heat accompanying the change of the Monsoon in April and May, which is most prejudicial to dwellers in a large and crowded city.

In 1925, however, the last quarter was the least healthy, due to a heavy mortality from the three diseases mentioned above, but for which the record for the year would have been a good one. The increase in malaria is partly attributable to the great amount of new land being opened for rubber cultivation, owing to the high price of rubber.

In addition to persons who contract the disease in the Colony, many malarial cases drift into Singapore from the Unfederated State of Johore, and into Penang from the Unfederated State of Kedah, and enter our hospitals, thus swelling our sickness and death-rates. The rise in tuberculosis and pneumonia in the last quarter is perhaps due to increased overcrowding of the cities of Singapore and Penang, owing to the boom in rubber and tin, and to the disturbed conditions in China.

It is to be feared that these factors may result in a rise in the death-rate in 1926. The fact that nevertheless the death-rate 27·26 per thousand, is the lowest on record is due to a considerable fall in Malacca, and a slight fall in Penang Settlement which were nearly counteracted by a rise of 1·12 per thousand in Singapore.

General Diseases.

(1) *Beri-Beri.*—The actual population in 1911 was 711,951 and deaths from Beri-beri 2,056.

The estimated population in 1918 was 827,719 and deaths from Beri-beri 1,958.

The deaths from Beri-beri in the last 7 years are:—

	Deaths from Beri-beri.	
1919	1,430	
1920	1,025	
1921	1,299	Census population 881,939
1922	1,388	
1923	904	
1924	910	
1925	973	Estimated population 994,261.

Food rationing, leading to a decrease in the use of overmilled rice was in practice during the first 3 of these years.

The further drop in the last 3 years may be partly attributed to the effect of better education, though individual cases of Beri-beri at times occur after an increase of prosperity, enabling a too exclusive taste for white rice to be gratified.

(2) The Pneumonias are mentioned here because classified as a General Disease. They caused 1,571 deaths against 1,669 in 1924.

There were more deaths than usual from this cause in Singapore City (1,481 against 1,262 in 1924).

(3) *Convulsions.*—No less than 3,890 deaths are so registered as against 3,832 in 1924. As long as only slightly over one-third of the population dying are seen by a qualified medical practitioner before death, the return under this head, which doubtless includes many deaths due to dietetic errors, to tetanus and to malaria in children, will be a large one: it is, after "Fever Unspecified", the favourite report of the uneducated Chinese or Malay to the local police station.

Infectious Diseases.

(1) Dangerous infectious diseases contributed 53 deaths from Plague, 2 deaths from Small-pox, 2 deaths from Cholera, and 21 deaths from Cerebro-spinal fever.

All the above occurred in Singapore, except 1 death from Cholera, and 3 deaths from Cerebro-spinal fever in Penang.

(*a*) *Plague.*—Fifty-nine cases of Plague were detected, but there were doubtless other milder cases as 34 of the cases were found dead, and there was a total of 53 deaths. The months from June to October were free from plague, except for 3 deaths in July. Fifty-five cases were bubonic in type and 4 septicæmic.

The Municipal Health Officer had 4,217 rats examined, of which 12 were found infected. He reports that on 2,769 rats brought to his laboratory alive 8,511 fleas (8,470 X. Cheopis) were found, or just over 3 fleas per rat. He comes to the conclusion that there is a connection between the relatively small amount of rat plague and of human plague, and the small number of fleas per rat.

It would also appear that the high temperature in Singapore is unfavourable to plague: the majority of cases occur in the cooler months. All the cases apparently originated in Singapore.

(*b*) *Small-pox.*—There were only 12 cases of small-pox (of which at least 6 came on ships) with 2 deaths, during the year.

Vaccinations.—Forty thousand and three vaccinations were performed, of which 27,519 were returned as perfect, 2,896 as modified, 1,971 as failed and 7,617 as not seen.

OTHER INFECTIOUS DISEASES.

2.—(*a*) *Tuberculosis.*—Two thousand six hundred and four deaths were registered in the Colony against 2,389 in 1924.

The Municipal Health Officer, Singapore, points out that many of the pneumonia deaths may really be due to pulmonary tuberculosis.

In Singapore City, approximately one quarter of the deaths from all causes were due to these two diseases, largely the result of overcrowding.

Malaria.—In considering the deaths from Malaria, those registered as from Fever Unspecified, the majority of which are probably malaria, must also be taken into account. Returns for the last 4 years are:—

	Malaria.	*Fever Unspecified.*	*Total.*
1922	3,977	3,051	7,028
1923	3,430	2,946	6,376
1924	3,462	2,706	6,168
1925	4,235	2,043	6,278

The rise in deaths registered as due to malaria is mainly due to more accurate certification especially in Penang, but there was an unusual increase already referred to in the last quarter of the year.

Deaths registered as Malaria in the various Settlements were:—

Penang Settlement	2,011
Malacca ,, ...	1,114
Singapore Settlement (including Labuan)	1,110

Of the Singapore deaths 962 occurred within Municipal Limits, but many were undoubtedly infected in rural areas of Singapore or Johore.

Dysentery was responsible for 857 deaths against 842 in 1924. The distribution was—

Dysentery Amœbic	174
,, Bacillary	235
,, Unclassified	448
	857

Diarrhœa and Enteritis caused 1,043 deaths against 933 in 1924.

VENEREAL DISEASES.

There were 219 deaths from Venereal Diseases. The numbers treated at hospitals and clinics totalled.

	1923.	*1924.*	*1925.*
In-patients	4,374	4,362	4,721
Out-patients	6,476	18,994	20,089
	10,850	23,356	24,810

LEPROSY.

(*a*) The number admitted to institutions increased by 103 during the year.

	Station.	*Remained.*	*Admitted.*	*Died.*	*Absconded.*	*Dis-charged.*	*Remained.*
Men							
	Pulau Jerejak ...	584	247	117	7	4	703
	Singapore ...	48	16	10	11	7	36
Women							
	Penang ...	38	10	4	—	—	44
	Singapore ...	49	4	12	—	—	39
		719	277	143	18	11	822

(*b*) *Buildings.*—Wards to accommodate an extra 200 were completed at Pulau Jerejak, greatly relieving the overcrowding there. The new female leper station in Singapore should be ready for occupation about the middle of 1926.

(*c*) *Treatment.*—Over 200 of the admissions were advanced cases. Forty-nine sought admission voluntarily. With a larger number of cases, deaths are now less than half the 1921 figure.

	1921.	*1922.*	*1923.*	*1924.*	*1925.*
Cases ...	810	868	888	891	996
Deaths ...	231	207	164	150	147

The pure expressed oil of Hydnocarpus Wightiana has given the best results.

Reports by Dr. E. D. LINDOW, Medical Officer, Tan Tock Seng's Hospital and Dr. A. H. WHEATLEY, Deputy Medical Officer, Pulau Jerejak, are appended. (*Vide* Appendix *A* and Appendix *B*).

HELMINTHIC DISEASES.

Ankylostomiasis.—The total numbers of Ankylostomiasis cases treated and of deaths therefrom in the hospitals of the Colony for the past 5 years are:—

Year.	*Remained.*	*Admitted.*	*Total treated.*	*Deaths.*
1921 ...	100	1,844	1,944	278
1922 ...	91	2,064	2,155	163
1923 ...	109	2,399	2,508	124
1924 ...	87	1,800	1,887	120
1925 ...	195	4,304	4,499	123

The increase in these figures is largely due to the preliminary survey of hookworm infection in the Colony, carried out by Dr. MILFORD BARNES and Dr. PAUL RUSSELL of the Rockefeller Foundation between the beginning of March, and the end of September, 1925.

Hearty thanks are due to the International Health Board of the Rockefeller Foundation, for placing the services of these two officers at our disposal, and meeting all the expenses of the survey, with a view to the institution of a joint hookworm and rural sanitation campaign in 1926. That the survey has been thoroughly carried out will be realised from the summary of Dr. PAUL F. RUSSELL which is attached as Appendix *E*.

VITAL STATISTICS.

Under the heading Table *III*, the following ten Tables are appended:—

Table III A.—Estimated population with birth and death-rates for the years 1924 and 1925.

Table III B.—Quarterly death-rates for various parts of the Colony during the past 3 years.

Table III C.—Population estimated racially and collectively of the Straits Settlements for the years 1925, 1924, and 1923.

Table III D.—Births registered in the Straits Settlements during 1925 and their Ratio per mille of Population.

Table III E.—Births registered in the Straits Settlements during 1925 according to Nationalities.

Table III F.—Deaths registered in the Straits Settlements in 1925 according to Nationalities.

Table III G.—Deaths registered in the Straits Settlements in 1925 under different group of Ages.

Table III H.—Table showing the Infantile Mortality (under one year) in the Straits Settlements including children born elsewhere.

Table III I.—Table showing the Infantile Mortality (under one year) in the Straits Settlements and Nationalities excluding children born elsewhere.

Table III J.—Deaths registered in the Straits Settlements as regards certificates in the year 1925.

2. *Births.*—The number of births registered throughout the Settlements during the year 1925 was 31,665 (males 16,444 and females 15,221) as compared with 31,028 (16,210 males and 14,818 females) in the previous year: this represents a crude birth-rate of 31·98 per thousand persons living, as against 32·29 in the previous year and 30·43 in 1923.

3. In every 100 births registered there were 51·93 males and 48·07 females giving a percentage of 92·56 females to every 100 males born.

4. One thousand three hundred and forty-nine still births were registered in 1925 as compared with one thousand four hundred and ninety-six in the previous year—the percentage to those born alive was 4·26 as against 4·82 in 1925.

5. The highest birth-rate according to nationalities was 37·33 per thousand of population amongst Malays, the "Other Nationalities" coming next with a ratio of 32·21 per thousand of population, *vide* Appendix *E*.

6. The deaths from all causes in 1925 were 27,106 (males 17,505 and females 9,601). The crude death-rate of 27·26 per thousand of population as

against 27·42 in the previous year, is the lowest on record. Death-rates for the last fifteen years are:—

Year.	*Ratio per mille.*	
1911 (Census) ...	... 46·46	
1912 ...	... 39·01	
1913 ...	... 34·93	
1914 ...	... 34·13	
1915 ...	... 29·15	(*a*) Repatriation of several thousands of decrepit Chinese.
1916 ...	... 30·70	
1917 ...	... 36·98	
1918 ...	... 43·85	(*b*) Influenza Epidemic.
1919 ...	... 33·04	
1920 ...	... 33·20	
1921 (Census) ...	... 31·54	
1922 ...	... 30·68	
1923 ...	... 27·80	
1924 ...	... 27·42	
1925 ...	... 27·26.	

7. The highest racial death-rate was classed under Chinese with a ratio of 28·41 per thousand of population, the Malays coming next with a ratio of 26·98 per thousand of population.

8. The infantile mortality (deaths of children under 1 year of age) exclusive of children born elsewhere was 184·78 as against 204·76 per thousand births in 1924: it is much below the previous best record 200·73 in 1923. Including children born elsewhere, the infantile mortality was 194 per thousand.

9. Table showing the sick, invaliding and deaths of European Officials of all ranks:

	1923.	*1924.*	*1925.*
(1) Total number of Officials on the Establishment	567	622	671
(2) Average number resident in Colony	487	538	573
(3) Total number of sick list ...	215	174	325
(4) Total number of days on sick list	1,991	1,474	3,726
(5) Total number invalided ...	1	3	10
(6) Total deaths	3	1	2
(7) Total deaths in the Colony ...	3	1	2
(8) Average daily number on sick list	·59	·48	·89
(9) Average number of days on sick list	5·45	8·47	10·2
(10) Percentage of deaths to number resident	·62	·18	·35

Accurate figures in the case of Native Officials are not available for 1925, but will be collected with a view to the report for 1926.

III.—HYGIENE AND SANITATION.

A. There is as yet no Chief Health Officer for the Straits Settlements. I am, therefore, including in this section under the signature of the officers concerned, reports from the Chief Health Officer, Singapore, Senior Health Officer, Penang and Health Officer, Malacca; a report on the preliminary hookworm survey of the Colony by the resident health officer of the International Health Board of the Rockefeller Foundation is attached as Appendix *E*.

The Port Health Administration is under the control of the Government Health Officers mentioned, and is therefore included in this section. The report on School Hygiene follows the reports of these officers.

As regards preventive measures against mosquito-borne diseases, a large amount of permanent anti-malarial drainage was carried out in Singapore and Penang Islands, Province Wellesley and the Dindings, and preliminary surveys were made in Malacca.

With the exception of a small amount of water-borne sewage in Singapore, the collection of the whole of the night-soil in the Straits Settlements is by hand: in some parts it is then dumped out at sea, in others it is incinerated or buried, and yet again it is often used as fertiliser.

Scavenging is performed in cities by the Municipal Authorities and in the country by Rural Boards; in both cases the refuse is incinerated.

The piped water supplies are excellent in Singapore and Penang and are being greatly extended to meet the needs of the growing population; the extension in the case of Singapore is coming from the mainland of Johore. A good piped supply is now being introduced into Malacca town. In rural areas, some of the small towns and villages have piped supplies while many smaller villages, kampongs and isolated houses still depend upon shallow wells.

Offensive trades operate almost entirely in the municipalities where they are effectively controlled.

As regards labour in the rural areas, organised labour is engaged mostly on rubber estates and on public works. The larger estates employ medical officers, and have small hospitals or sick lines, from which serious cases are frequently transferred to government hospitals.

The scheme under which the Malacca Agricultural Medical Board (Board of Planters) has grouped and assessed the whole of the estates in Malacca, engaged six medical officers and stationed them at convenient centres, and divided the medical charge of estates amongst them, has proved a success, and is partly responsible for the drop in the Malacca death-rate. Some of these medical officers have done good preventive work. The system under which each estate makes its own arrangement for medical attendance still prevails in Province Wellesley and the Dindings: it sometimes results in superficial attention from visiting practitioners, who may live far from the area, and be too busy to do the work properly.

The health of Public Works labour is directly cared for by the Medical Department.

Factories and workshops in cities are under the control of the Municipal Health Officers.

The congestion in Singapore and Penang with the resultant overcrowding is an important factor in the heavy mortality from Tuberculosis, Pneumonia and Infantile diseases.

The inspection and control of food is carried out by the Municipal and Government Health Officers in their respective areas. There are markets at all main centres.

Milk vendors, eating houses, meat shops, aerated water factories are licensed and inspected. Water, milk and other beverages, and foodstuffs both local and imported are regularly analysed, and action taken if indicated.

The only common deficiency disease is Beri-beri.

A League of Nations Health Organisation Eastern Bureau was established in Singapore in March, 1925, for the rapid collection and dissemination of epidemiological intelligence throughout the Far East; reports are also sent to Geneva.

The Rockefeller Foundation promised a sum of $125,000 gold towards the expenses of the Bureau for the first 5 years.

An international conference with Dr. Norman White of the League of Nations Health Section in the Chair, was held in Singapore in February to consider the scope of and estimates for the Bureau.

The following countries sent delegates:—

British ...	British India, Straits Settlements, Federated Malay States, Ceylon, Hongkong, and British North Borneo.
Holland ...	Netherlands East Indies.
France ...	French Indo-China.
Japan.	
Siam.	
China.	

The Philippine Islands sent the head of the United States Public Health Service in the Far East as an Observer.

Dr. Gilbert Brooke was appointed part-time Director of the Bureau.

The Government of the Straits Settlements offered to contribute a sum of $5,000 a year towards the expenses of the Bureau for a period of 5 years.

The results of the first year's work have fully justified the foundation of the Bureau.

SINGAPORE.

Resume of work of the Government Health Branch, Singapore, (1925), by Dr. Gilbert E. Brooke, d.p.h., *Chief Health Officer, Singapore.*

I.

(*a*) Administration Data:—

1. *Staff.*—Number of Health Officers and Assistant Health Officers—7 (One temporary and one half-time):—

Number of Inspectors, Over-seers, etc.	14
Number of Clerks and Interpreters	5
Total Quarantine Station Staff	69
Number of Rural Mandores and Masons ..	21
Average number of coolies employed in Rural Districts	257

2. *Populations controlled as regards Health work:*—

(*a*) Estimated Rural Population	77,719
(*b*) Total Quarantine Contacts	46,063
(*c*) Gaol Inmates (daily average)	1,207
(*d*) Reformatory Inmates (daily average) ...	65

3. *Populations casually or partially controlled as regards Health Work*:—

Maritime (Crew and Passengers examined except those quarantined)	320,608
Government Servants in Singapore	5,631
Pupils in Government and Aided Schools, Singapore	10,882

4. *Finance*:—

		$	c.
1.	Budget Appropriations for Health Branch ...	232,232	00
2.	Revenue Recovered—	93,430	02
3.	Net cost	138,801	98

(*b*) *Town and Office Work*:—

Number of Bills of Health issued	3,204
Ports against which Quarantine Restrictions were imposed	19
Prosecutions for breach of Quarantine and Prevention of Disease Ordinance	2
Number of bonds issued	15
Disinfection Certificates issued	781
Sanitary Inspections of Schools by Health Officer ...	26
Scholars examined by Medical Officer	2,791
Number of samples of mosquito larvæ sent for identification	1,370
Prosecutions for breach of Municipal (Rural Board) Ordinance	69

(*c*) *Port Work*:—

1.	Number of different world ports from which steamers arrived	357
2.	Number and names of ports Quarantined—19—as under—Amoy, Bangkok, Bombay, Calcutta, Hainan, Kobe, Madras, Manila, Negapatam, Osaka, Padang, Pakan Baroe, Rangoon, Sourabaya, Saigon, Siak, Shanghai, Swatow, Yokohama.	
3.	Tonnage entering Singapore	12,014,767
4.	Number of ships entering the port	7,150
5.	Number of ships examined	1,018
6.	Number of pilgrim ships to Jeddah	—
7.	Ships infected	31
8.	Fumigation by disinfecting launches	793
9.	Fumigation by Cyanogen Chloride gas ...	3
10.	Number of disinfection certificates issued ...	781
11.	Amount received for disinfection certificates and fumigation charges	$58,736
12.	Crew examined	89,529
13.	Passengers examined	277,142
14.	Undertakings issued to cabin passengers ...	450
15.	Chinese immigrants	214,692
16.	Number of Bills of Health issued	3,204
17.	Amount received for same in stamp fees ...	$15,715
18.	Corpses inspected in harbour	37
19.	Number of permits to import or export corpses . .	33
20.	Amount received for same in stamp fees ...	$330
21.	Water boats examined	45

22. Ships' rats caught for diagnostic purposes:—

	Total ships trapped.	*Diardi.*	*Norvegicus.*
Local Trade	5	11	—
Foreign Trade	35	114	11
Wharves and Godowns ...	—	99	10
Total ...	40	224	21

(*d*) *Quarantine Station Data*:—

1.	Total passengers admitted during the year ...	46,063
2.	Greatest number admitted in any one day (3/5/25)	1,968
3.	Maximum number in residence on any one day (17/12/25)	4,845
4.	Minimum number in residence on any one day (13/1/25)	2
	(NOTE—Days when there were none in residence)	143
5.	Total sick treated in Hospital	486
6.	Average daily number of sick in Hospital ...	1·334
7.	Maximum number in Hospital on any one day (16/3/25)	61
8.	Minimum number in Hospital on any one day (1/1/25)	1
9.	Total deaths during the year	62
10.	Deaths rate amongst total treated	109·05 (per mille)
11.	Total number of deaths amongst cases treated ...	53
12.	Total cases of Cholera admitted	—
13.	Total cases of Plague admitted	—
14.	Total cases of Small-pox admitted	82
15.	Number of vaccinations	25,855
16.	Number of Municipal Contacts admitted—	
	Small-pox	6
	Cerebro-spinal meningitis	1
17.	Number of Government Contacts admitted—	
	Small-pox	14
	Plague	2
18.	Number of non-infected ships whose passengers subsequently developed infectious diseases on the Island (None out of 150)	—
19.	Number of infected ships whose passengers subsequently developed infectious diseases on the Island (5 out of 26)	5
20.	Number of gallons of Singapore water pumped up	1,914,752

(*e*) *Resume of Rural Work*:—

DATA.	District **C.** Pasir Panjang.	District **D.** Bukit Timah.	District **E.** Seletar.	District **F.** Paya Lebar.	District **G.** Siglap.	District **H.** Marine.	Total or Mean.
Estimated Population	8,624	11,400	8,748	16,173	22,230	10,544	77,719
Estimated number of houses	2,494	1,732	1,520	2,391	3,246	...	...
Estimated inhabitants per house	3.4	6.5	5.7	6.7	6.8	...	...
Number of Police Stations	2	3	1	2	4	20	32
Number of Malay Vernacular Schools	2	1	5	2	5	10	31
Number of Markets	...	...	...	...	2	...	2
Number of Incinerators	5	3	3	5	7	...	23
Registered Dairies and Milk-sellers	...	...	...	...	...	...	3
Registered Piggeries	...	...	...	...	...	...	40
WORK DONE.							
Houses Visited by Sanitary Inspectors	1,445	1,435	1,070	1,432	1,110	227	6,719
Number of Notices served	61	53	131	210	175	...	630
Prosecutions (Sanitation)	10	...	35	17	7	...	69
Cubic feet of rubbish consumed	137,780	60,600	30,000	162,425	346,750	24,000	759,555
Average daily amount for each Incinerator — Cubic feet	75	51	27	88	135	...	...
Plague cases	...	1	...	...	2	1	4
Cholera cases	...	...	...	...	...	...	...
Small-pox cases	...	...	...	...	...	1	1
Vaccinations performed in Rural Areas	...	...	...	...	...	...	5,645
Dispensary Attendance	1,306	8,098	...	5,658	13,824	...	28,886
Malaria admissions to Hospitals from Rural Areas	...	...	...	...	...	...	426
Expenditure on Anti-malarial Works including expenditure on A. M. Oil	...	...	...	...	...	...	$68,077.58
Water samples sent for Analysis	4	2	1	3	7	7	24

REVIEW OF GENERAL CONDITIONS OF SINGAPORE AND THE INFLUENCE THEREON OF CONDITIONS THROUGH THE EASTERN ARENA.

The population of Singapore at the Census of March 1921, was:—

Urban areas	350,355
Rural Districts	68,003

The estimated population for 1925 was:—

Urban areas	396,341
Rural Districts	77,719

The 1925 birth-rate for the settlement was 31·73 per mille, 31·19 per mille for the Urban Area and 34·49 per mille for the Rural Districts. The crude death-rate was 23·71 pe mille for Rural Districts and 28·21 per mille for Urban area, as compared with last year's figures of 25·99 and 27·08. The actual number of deaths was 13,573 compared with 12,382 during the previous year. There were no special outbreaks of infectious disease in Singapore during the year; Plague cases numbered 57; Cholera case 1; and Small-pox cases 10.

No Singapore cases of plague can be traced as having been directly introduced from the outside.

The plotted map of Singapore plague cases shows as usual two town epidemic centres, one in the neighbourhood of Rochore and the other in the neighbourhood of Cross Street.

The year was memorable in that the League of Nations established an Epidemiological Bureau in February, the object of which was to collect and disseminate details with regard to infectious disease. This Bureau has proved of great use throughout all Eastern Arena—to Singapore, no less than all the other places and returns have been received from an increasing number of ports, rendering the information more and more valuable, as time goes on. In addition to these returns, a large amount of information with regard to infected ships also was received through the Bureau. By these means, the various Governments are saved the expense of telegraphing to all the neighbouring Governments, which now receive regular information through the Bureau.

THE WORK OF THE PORT OF SINGAPORE.

The tonnage entering in Singapore from 357 different world ports, amounted to 12,014,767, represented by 7,150 ships. Of that number, 1,018 ships were examined by the Department.

The following ports were quarantined for infectious disease during the year under review:—

Amoy, Bangkok, Bombay, Calcutta, Hainan, Kobe, Madras, Manila. Negapatam, Osaka, Padang, Pekang, Bahroe, Rangoon, Sourabaya, Saigon, Siak, Shanghai, Swatow and Yokohama.

Thirty-one ships were infected, and were dealt with as the occasion demanded.

The disinfecting launches carried out 793 fumigations during the year. Some of these were on account of infection, but the majority were done at the request of ships' agents, to meet with the requirements of neighbouring Governments. In addition to these fumigations, which were carried out with sulphur gas, three fumigations were done by request with cyanogen chloride. The latter fumigation has certain advantages; but, in view of the supervision required, and the difficulty of introducing the gas with sufficient penetration amongst a fully laden hold, it seems to me that its frequent use is undesirable.

Disinfection Certificates issued amounted to 781. Crews examined totalled 89,529. Passengers examined 277,142. During the last 23 years, the totals of these examinations have amounted to 8,968,682.

The Chinese Immigrants arriving in the port amounted to 214,692.

The number of bills of health issued was 3,204, representing a fee-value of $15,715. The water supply to the shipping was examined on several occasions; its standard was good. Forty-five water boats were also examined.

Owing to unsettled conditions in Arabia no pilgrimage occurred during the year 1925.

With regard to the ship rat population, a certain amount of trapping was carried out.

	Total ships trapped.	*Diardi.*	*Norvegicus.*
Local Trade	5	11	—
Foreign Trade	35	114	11
Wharves and Godowns ...	—	99	10
	Total ...	224	21

It is interesting to note that the proportion of Diardi to Norvegicus is approximately the same, both in local trade and in foreign trade ships as well as at the wharves and godowns. If this distribution is a constant feature, it tends to prove that Norvegicus is not a common traveller by ship, and this may explain the frequency with which plague is spread by means of ship rats from port to port.

WORK OF THE QUARANTINE STATION.

The favourable health conditions which existed throughout the ports of the Eastern Arena were responsible for the comparatively small use made of the quarantine stations. For 143 days there were no contacts in the camps. The total passengers admitted during the year were 46,063, the greatest number admitted in any one day being 1,968. The maximum number of residence on any one day amounted to 4,845. The number of vaccinations performed was 25,855.

Some difficulties were experienced in maintaining the staff at its proper strength. This was due, generally speaking, to the increasing rubber boom, which attracted labour to many parts of the peninsula.

THE WORK IN RURAL DISTRICTS OF SINGAPORE.

The Island of Singapore both in shape and size is practically identical with the Isle of Wight.

It is with the districts outside municipal limits that the Government Health Branch is concerned.

The work in these districts is carried out under two headings:—

1. Conservancy and 2. Anti-malarial work.

The Staff for these divisions consists of:—

1	Health Officer.
1	Assistant Health Officer.
1	Chief Sanitary Inspector.
1	Anti-Mosquito Inspector.
1	Assistant Anti-Mosquito Inspector.
5	District Sanitary Inspectors.
1	Town Sanitary Inspector.
1	Mosquito Collector.
1	Assistant Mosquito Collector.
1	Vaccinator.
3	Overseers.
17	Mandores.
4	Masons, and
257	Coolies.

The districts dealt with cover an area of about 188 square miles with an estimated population of 77,719.

The Island is divided into five sanitary districts, in each of which the chief village is made the head-quarters.

The rural districts were remarkably free from infectious diseases during the year, there being only three cases of plague, one of which was in a vagrant, two cases of diphtheria, 11 cases of measles, 20 cases of chicken-pox, one small-pox, and 4 cases of mumps. No cholera or typhoid was reported.

Fifty-six disinfections were carried out in the rural districts, and 8 in government buildings in town.

Five thousand six hundred and forty-five vaccinations were performed, as compared with 3,002 during the previous year. Perfect results were obtained in 2,255 instances. Seventy-nine modified results and 664 failures were reported.

In the rural areas, the estimated number of houses was 11,383; 6,492 house to house inspections were made by the district sanitary inspectors, village scavenging and refuse collection is carried out by our own conservancy coolies, and all the villages of the Island are supplied with one or more permanent incinerators, according to their size. Seven hundred and fifty-nine thousand five hundred and fifty-five cubic feet of rubbish were consumed by these means.

The Health Officer in charge of rural districts, Dr. J. I Baeza, after a considerable amount of experiment, devised a very suitable latrine for rural purposes, which is capable of being built at a very small cost. It is proposed to issue these latrines to the householders of the various villages, as the sanitary conditions warrant. The provision of back-lanes has become an established fact. A beginning has been made in the villages of Bukit Timah and Bukit Panjang where back-lanes are almost completed and the installation of the latrines will be very shortly effected. This sanitary effort, the importance of which cannot be over-estimated, will, it is hoped, do much to reduce the various diseases which are carried by the improper disposal of night-soil and the breeding of flies. In several places fly-breeding farms are actually in existence.

Seventeen samples of water from wells in rural districts were submitted for examination. Of these three were found to be potable. The remainder were condemned as dangerous.

Seventy-two rats were examined of which 48 were classed as Norvegicus and 24 as Diardi. It will thus be seen that the proportions of these two species are in inverse ratio to those found in the port and on ships.

Six hundred and thirty intimation notices were served on land-owners of which 75 were complied with. Legal proceedings were taken in 69 cases.

Thirteen lepers were found in the rural districts, two of whom were allowed to live in isolation and placed on our register; the rest were sent to the Leper Asylum.

The sanitation of government buildings and crown land within municipal limits necessitated 260 visits.

In the anti-mosquito section $68,077.58 was expended. Six thousand two hundred and ninety dollars and sixty-seven cents was recovered for work done on privately-owned properties. Mosquito surveys were widely carried out in the districts of Bukit Timah and Paya Lebar, Pasir Panjang and Geylang. Monthly mosquito indices were kept with the villages of Bukit Timah, Bukit Panjang, 6th mile Paya Lebar, 7½ mile Pasir Panjang, and the village of Bedok.

Oil spraying was done where necessary with a mixture consisting of 2 parts of solar oil to 1 of crude oil.

The labour force employed by these sub-departments consisted of 17 mandores, 4 masons, and 257 coolies.

The laboratory at the central sanitary depôt at Jalan Klapa was regularly used for the identification of mosquitoes and for the preparation of specimens.

In the Construction work, dangerous breeding areas were subsoil-drained; and 50,037 feet of subsoil and inverts were laid during the year.

GILBERT E. BROOKE,
Chief Health Officer, Singapore.

EXTRACT FROM THE REPORT OF THE RURAL HEALTH OFFICER, SINGAPORE, DR. J. I. BAEZA, D.P.H.

This is divided into—

1. The sanitation of the rural areas.
2. Anti-malarial work in the rural areas.

In the Sanitary Section, Dr. BAEZA was assisted by Dr. P. C. FERNANDEZ, Assistant Health Officer, and in the Anti-Malarial Section by Mr. J. S. DE VILLIERS, Chief Sanitary Inspector.

1. *Sanitation.*—The work of scavenging and collection of refuse and the cleaning of drains was carried out by our conservancy coolies under their respective mandores. In consequence of the extra amount of refuse in the Geylang District on account of the growing population it was found necessary to obtain the services of an overseer to assist the sanitary inspector. It was also found necessary for this reason to erect a new incinerator on East Coast Road (Telok Kurau Section) to burn this extra amount of refuse; towards the end of the year a double incinerator with a common flue was completed and this appears to be working satisfactorily.

A small and dilapidated one at Joo Chiat Road was demolished hence the number of our village incinerators remains the same, *viz*:—Twenty-two. At the beginning of the year a special type of portable sectional concrete latrine (consisting of seven concrete slabs held together by iron rods and a standard pail), which I designed was constructed and has since been approved as the type to be used in the rural area: three hundred and twenty-one of these were ordered and completed towards the end of the year. It is proposed to issue these latrines to the householders of the Bukit Timah District, in the first place with a view to a night-soil removal scheme being undertaken by the Rural Board in this district in the year 1926, and to a gradual extension of the scheme to the whole rural area of Singapore. That proper control of night-soil removal and distribution by the Sanitary Authority is required is evidenced by the discovery during the year of the existence of what may be called fly farms, where special shallow concrete pits were erected to take night-soil in thin layers in which maggots were bred. The industry was a well organised one and apparently money had not been spared to make it a success. The maggots were sold at the rate of 40 cents per catty, and were purchased by the duck rearers, as food for fattening their market stock. These farms were at once closed down, and in one case, it is believed this action involved the owners in a capital loss of $20,000. During the year the sanitary inspectors paid 519 visits to rubber factories, copra-sheds and other factories; 5,538 visits to coffee-shops, eating-houses, butcher-shops, slaughter-houses, grocers and markets and 5,786 visits to piggeries, dairies and cow-sheds.

General.—The completion of the drains on both sides of Joo Chiat Road has certainly contributed to the improvement which is now evident in this portion of Geylang District. In a similar manner will the completion of the new market and the drain at the municipal and rural boundary (which are now well on the course of construction) improve sanitary conditions in this area. Building plans to the number of 157 were submitted—of these 137 were passed and 20 were rejected.

ANTI-MOSQUITO REPORT, 1925.

2. The total amount voted for anti-mosquito work was $100,000 of which $68,077.58 was expended. Six thousand two hundred and ninety dollars and sixty-seven cents was recovered for work done on properties that were privately owned.

DETAILS OF WORK.

(*A*) *Bukit Timah.*—

(1) *Mosquito Surveys.*—Mosquito surveys were made around the Bukit Timah, Bukit Panjang and Woodland Villages, the Reformatory school and

along Jurong, Chua Chu Kang, Bukit Timah and Kranji Roads. Mosquito indices of Bukit Timah and Bukit Panjang Villages were kept.

(2) *Oil Spraying.*—Oiling was carried out weekly where necessary over the following areas:—

(*a*) For a mile around the Woodlands Police Station.
(*b*) For a mile around Bukit Timah and Bukit Panjang Village.
(*c*) For a quarter of a mile around Reformatory School.

The average amount of oil used per week was:—

101·80 gallons of solar oil.
50·90 gallons of crude oil.

(3) *Construction Work.*—Dangerous breeding areas were subsoil drained.

Thirty-one thousand four hundred and ninety-six feet of subsoil pipes and inverts were laid.

(4) *Maintenance Work.*—Maintenance on anti-malarial drainage works was commenced from the 1st June.

(5) *Labour.*—An average force of 1 overseer, 4 mandores, 1 mason, and 57 coolies were employed.

(*B*) *Paya Lebar Division.*—

(1) *Mosquito Surveys.*—Mosquito surveys were regularly carried out for a mile on each side of Serangoon Road from the 5½ mile to the 7½ mile and along Chua Chu Kang, Paya Lebar, Tampinis and Ponggol Roads. Monthly mosquito indices were kept of houses around the 6th mile village.

(2) *Oil Spraying.*—Oiling was done weekly where necessary for a half a mile on each side of Serangoon Road from the 5½ mile and along Paya Lebar, Tampinis, Chua Chu Kang and Punggol Roads.

31·2 gallons of Crude Oil and 47·5 gallons of Solar Oil were used each week.

(3) *Construction Work.*—Ten thousand six hundred and ninety-three feet of subsoil pipes and inverts were laid.

(4) *Maintenance Work.*—Was done as required.

(5) *Labour.*—An average force of 1 overseer, 1 mandore, 1 mason and 22 coolies were employed.

(*C*) *Pasir Panjang Division.*—

(1) *Mosquito Surveys.*—Surveys were carried out regularly around Labrador Convalescent Home and Bungalow and along Pasir Panjang Road from the 4½ mile to the 8th mile and in the Alexandra Ravine. Monthly mosquito indices of houses at the 7½ mile were kept.

(2) *Oiling Spraying.*—Oiling was done where necessary around the Convalescent Home, along Pasir Panjang and at the Alexandra Ravine. Five gallons of oil mixture were used each week.

(3) *Construction Work and Maintenance Work* were carried out at Labrador and at the 5½ mile drain.

(4) *Labour.*—An average force of 1 mason, 2 mandores and 36 coolies were employed in this District.

(*D*) *Geylang Division.*—

(1) *Mosquito Surveys.*—Surveys were made throughout the area between the East Coast Road, Changi Road and Siglap. Surveys were also made at Pulau Ubin and Pulau Tekong. Monthly mosquito indices of houses at Bedok were kept.

(2) *Oil Spraying.*—Oiling was done where necessary at Siglap and along Joo Chiat. Twenty gallons of oil mixture were used each week.

(3) *Work Done.*—Culicine and Stegomyia mosquitoes were mainly dealt with.

(4) *Labour.*—An average force of 1 mandore and 22 coolies was employed.

J. I. BAEZA,
Health Officer (Rural).

PENANG.

By Dr. F. R. Sayers, D.P.H., *Senior Health Officer, Penang.*

(*a*) For Public Health Administration the Settlement outside the Penang Municipal Limits is divided into seven areas which are under the general supervision of the Senior Health Officer. These areas and the officers responsible for the routine health duties in connection with them are:—

	District.	*Officers Responsible for.*	*Other duties of Officers.*
1.	Penang Harbour ...	Deputy Port Health Officer	—
2.	Quarantine Station, Pulau Jerejak ...	Deputy Health Officer (Quarantine)	—
3.	Leper Asylum, Pulau Jerejak ...	Deputy Medical Officer (Lepers)	—
4.	Penang Island Rural Area ...	Assistant Health Officer, (Rural)	Inspections of Vernacular Schools and Pupils within the Penang Municipal Limits.
5.	Province Wellesley, Northern and Central Districts	Medical and Health Officer, Province Wellesley, Northern and Central	Medical Officer's Duties.
6.	Province Wellesley, Southern District	Medical and Health Officer, Province Wellesley, South	Medical Officer's Duties.
7.	The Dindings ...	Assistant Medical and Health Officer, Dindings	Medical Officer's Duties.

(*b*) A Lay Superintendent is stationed at the Quarantine Station to relieve the Assistant Health Officer (Quarantine) of certain routine duties.

(*c*) The Penang Island Rural Board employs one chief sanitary inspector who is in charge of the rural board area. Under him are three district sanitary inspectors.

(*d*) The Province Wellesley Rural Board employs four district sanitary inspectors.

(*e*) The Dindings Rural Board employs one sanitary inspector.

(*f*) A temporary mosquito inspector and a temporary mosquito collector, are employed by the health branch, the former stationed at Penang and the latter at Lumut. Their principal work is checking the efficiency of various anti-malarial measures by searches for larvæ. The remainder of their time is spent in mosquito surveys of unsurveyed areas to discover where anti-malarial measures are required.

(*g*) A temporary dresser and two coolies are employed on the Penang Hills to supervise sanitation and treat sickness amongst the coolies who work on the hills.

(*h*) Vaccinations are performed by the health branch vaccinator in Penang Island rural area, by the dresser in charge at Balik Pulau Hospital, by a vaccinating dresser (in addition to his purely medical duties) in each district of Province Wellesley, and in the Dindings by the dressers stationed at Lumut and Pengkalan Bahru.

(*i*) In each rural district gangs of sanitary coolies and gangs of anti-mosquito coolies are employed whose duties are in connection with village sanitation and rural anti-mosquito measures respectively.

(*j*) Within the municipal limits the Government Health Branch is responsible only for the inspection of schools (English and vernacular), police stations and the labour Department's Depôt for labourers. The Municipal Health Officers are responsible for all other health duties within these limits.

II.—PORT.

(*a*) Ships, Crew units and passengers inspected numbered respectively 417; 56,399 and 146,805.

(*b*) No "Pilgrim Ships" cleared for Jeddah. Three "Pilgrim Ships" arrived from Jeddah with 1,209 refugees.

(*c*) Forty-five were "Indian Immigrant Ships" with 70,198 Labour Department Immigrants on board.

(*d*) Two hundred and eighty-eight were "Chinese Immigrant Ships"; a large proportion of their passengers were immigrant coolies from China.

(*e*) Fifteen ships arrived infected with a "dangerous infectious disease".

(*f*) From 15 infected ships 24 cases of "dangerous infectious disease" and 12,572 contacts were admitted, of these contacts 36 developed the particular disease for which they were quarantined, while 12,536 displayed no signs of it.

(*g*) Diseases treated in Hospital:—

Disease.	*Cases treated.*	*Deaths.*
Broncho Pneumonia	3	3
Cerebro Spinal Fever	5	4
Chicken-pox	35	—
Cholera	47	20
Diarrhœa	63	1
Enteritis	29	5
Enteric Fever	1	1
Influenza	284	15
Malaria	92	—
Measles	19	—
Plague	—	—
Pneumonia	22	4
Small-pox	8	1
Other Diseases	595	10
Totals	1,203	64

(*h*) Of the Cholera cases 13 were admitted from ships, of which 6 died (46·15 per cent) and 34 developed at the Station of which 14 died (41·17 per cent).

(*i*) Vaccinations numbered 42,514. The percentage of success for primary vaccinations was 91 per cent.

(*j*) Carbon Tetrachloride in doses of 5 to 60 minims (according to age) was administered to the Labour Department immigrants.

(*k*) The total rainfall was 2,430 m.m.

(*l*) The fresh water supply continued to be ample.

(*m*) Permanent anti-malarial measures progressed slowly throughout the year on account of the rocky and hilly nature of the sites. Amongst the resident staff and their dependents, numbering in all 146, there were 3 fresh cases of malaria as compared with 2 in 1924 and 6 in 1923.

Date of Arrival.	*Ship.*	*Port touched at.*	*Infection.*
28- 2-25	*Ellora*	Singapore	Small-pox.
6- 3-25	*Tara*	Madras and Negapatam	Small-pox.
20- 3-25	*Ellenga*	Madras and Negapatam	Small-pox.
12- 4-25	*Takada*	Amoy and Hongkong	Cerebro-spinal Fever.
17- 5-25	*Titan*	Jeddah	Small-pox.
26- 6-25	*Ellenga*	Madras and Negapatam	Small-pox.
7- 8-25	*Ellenga*	Madras and Negapatam	Cholera.
18- 9-25	*Teesta*	Madras and Negapatam	Small-pox.
26- 9-25	*Takliwa*	Madras and Negapatam	Small-pox.
14-10-25	*Lai Sang*	Amoy and Hongkong	Cerebro-spinal Fever.
16-10-25	*Teesta*	Madras and Negapatam	Cholera.
24-10-25	*Takliwa*	Madras and Negapatam	Cholera.
13-11-25	*Talamba*	Negapatam	Cholera.
12-12-25	*Teesta*	Madras and Negapatam	Cholera.
19-12-25	*Takliwa*	Madras and Negapatam	Cholera.

(*f*) The disinfecting launch *Kite* was in use on 25 occasions.

(*g*) Nine corpses were inspected on ships or tongkangs and permits to bury them were issued afterwards.

(*h*) Fourteen waterboats and two storage cisterns supplying the shipping of the Port were inspected. Samples of water from each were sent for bacteriological examination. Four samples were pronounced unsatisfactory. The cisterns concerned were dealt with and further samples were obtained which examination proved to be satisfactory.

(*i*) Statistics of twenty-one years' work:—

Years.	*Vessels.*	*Units of Crew and Passengers inspected.*
1905	869	214,136
1906	675	204,988
1907	633	219,830
1908	1,205	176,119
1909	503	161,971
1910	526	217,967
1911	1,144	277,151
1912	634	287,373
1913	818	272,473
1914	1,040	215,067
1915	405	148,662
1916	662	213,726
1917	367	203,737
1918	561	173,813
1919	493	210,839
1920	432	207,424
1921	461	197,446
1922	480	197,579
1923	442	182,349
1924	461	214,936
1925	417	203,204
Total	13,328	4,400,790

(*j*) Nineteen certificates of disinfection, nineteen permits to import, export or tranship coffins containing human remains, and 754 bills of health were issued. Fee for these $3,925 were received.

(*k*) "Exemption Permits" were issued to 106 ships.

(*l*) Nine certificates to accompany hides were issued; for these $18 were received.

(*m*) "Passenger Undertakings" were issued to 390 cabin passengers from "infected ships" to secure the observation of them ashore by a Health Officer.

No bonds for this purpose were entered by relatives or friends of passengers.

III.—QUARANTINE STATION.

(*a*) The station is designed to accommodate 5,323 inmates.

The largest number present on any one day was 2,990.

The average daily number present was 880.

The station was occupied daily throughout the year.

(*b*) From 137 ships 44,984 people were admitted.

(*c*) The Labour Department immigrant labourers with their relatives numbered 27,253.

(*d*) Deck passengers numbered 17,731.

(*e*) From 122 non-infected ships 32,412 were admitted, of these 32,402 were released without having developed the "dangerous infectious disease" for which they were quarantined.

(*f*) Statistics of twenty-one years' work.

Years.	Number admitted.	Average daily number of inmates.	Cases of Cerebro Spinal Fever.	Cases of Cholera.	Cases of Influenza.	Cases of Plague.	Cases of Small-pox.	Vaccinations performed.
1905 ...	10,406	171	...	1	...	...	10	No record.
1906 ...	23,283	461	...	8	...	2	16	6,490
1907 ...	17,650	116	...	24	...	1	4	5,652
1908 ...	21,875	366	...	9	...	2	51	5,691
1909 ...	23,059	359	...	2	...	1	25	5,614
1910 ...	71,876	1,524	...	33	...	2	62	12,205
1911 ...	34,957	3,470	...	387	...	1	109	63,988
1912 ...	55,493	1,111	...	4	...	4	75	38,297
1913 ...	53,937	120	...	12	...	1	11	37,276
1914 ...	40,399	116	...	9	...	...	171	32,609
1915 ...	23,176	487	...	...	...	...	3	21,562
1916 ...	42,736	817	...	1	8	...	11	36,806
1917 ...	37,559	820	...	12	...	...	11	36,808
1918 ...	33,481	720	...	80	98	...	7	29 536
1919 ...	50,733	1,189	...	264	344	...	6	39,941
1920 ...	43 733	932	...	8	596	...	4	41,230
1921 ...	14,653	353	...	3	39	...	42	10,377
1922 ..	31,247	567	...	...	179	...	6	26,675
1923 ...	24,129	479	...	9	84	...	2	23,359
1924 ...	28,701	634	...	151	170	...	...	25,779
1925 ...	44,984	880	5	47	284	...	8	42,514
Total ...	647,067	15,692	5	1,064	1,802	14	634	542,409

Yellow Fever and Typhus have never occurred.

IV.—RURAL AREAS.

(*a*) Vital Statistics:—

Rural Districts.	Estimated Population.	Total Births.	Crude Birth Rate per mille.	Total Deaths.	Crude Death Rate per mille.	Total deaths, infants under one year old.	Infantile Mortality per mille.
Penang Island ...	39,844(1)	1,465 (2)	36.77 (2)	1,404 (3)	35.24 (3)	196 (3)	139.79(3)
Province Wellesley ...	131,577	4,374	33.24	3,735	28.38	615	140.60
Dindings ...	15,185	433	28.71	342	22.52	68	157.94
Rural Areas of Settlement (excluding Pulau Jerejak)	186,606	6,272	33.61	5,481	29.37	879	140.15

(*b*) Vaccinations or re-vaccinations of Infants and Adults.

Districts.		*1924.*	*1925.*
Penang Island, North-eastern District	...	656	4,059
Penang Island, South-western District	...	7,074	5,591
Province Wellesley, Northern District	...	2,252	1,716
Province Wellesley, Central District	...	1,363	1,271
Province Wellesley, Southern District	...	1,165	952
Dindings	...	3,324	663
Totals	...	15,834	14,252

(*c*) The total number vaccinated or re-vaccinated in rural areas of the Settlement during the last 5 years, is 60,695.

(*d*) The estimates included a vote of fifty thousand dollars for anti-mosquito works in the Settlement of Penang. An extension of ten thousand dollars was granted in September. The vote was exhausted at the end of the year. It was expended thus:—

(1) *Permanent Works at Penang Island.*—(Hills Station, Waterfall Gardens, Aier Etam Village, Site for Marine Depôt, Glugor).

Pulau Jerejak.—(Quarantine Station, Leper Settlement).

Province Wellesley.—(Penaga Wireless Station, Villages of Butterworth, Bukit Mertajam and Sungei Bakap).

The Dindings.—(Lumut Village).

(2) *Temporary Measures at Penang Island.*—(Hills Station, Waterfall Gardens, the Villages of Aier Etam, Tanjong Tokong, Tanjong Bungah, Tanjong Uma, Batu Ferringhi, Batu Uban, Bayan Lepas, Telok Kumbar, Glugor, Sungei Nibong, Balik Pulau, Sungei Rusa and Sungei Batu).

Pulau Jerejak.—(Quarantine Station, Leper Settlement).

Province Wellesley.—(Penaga Wireless Station, Villages of Butterworth, Prai, Bukit Tengah, Bukit Mertajam and Sungei Bakap).

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(1) Population of Pulau Jerejak deducted. In the Census Return, 1921, it is included in the north eastern district of Penang Island.

(2) Births at Pulau Jerejak deducted.

(3) Deaths at Pulau Jerejak deducted.

(3) *Staff.*—(Mosquito inspector, mosquito collector, Hills station dresser, oiling overseers, mandores, coolies and clerk).

(4) Equipment and materials.

(*e*) Mosquito surveys were made either by the mosquito inspector or the mosquito collector of the following places:—

Penang Island.—(Hills Station, Waterfall Gardens, Villages of Aier Etam, Bagan Jermal, Tanjong Tokong, Tanjong Bungah, Telok Bahang, Batu Ferringhi, Tanjong Uma, Batu Uban, Glugor and Sungei Nibong.

Province Wellesley.—(Penaga Wireless Station, Villages of Butterworth, Prai, Bukit Tengah and Sungei Bakap).

The Dindings.—(Lumut Village, Pangkor Island, Sandycroft Estate and surroundings, Segari District and Kampong Acheh Estate).

Appropriate anti-malarial measures were commenced wherever necessary and possible on the conclusion of these surveys.

(*f*) To check the efficiency of the anti-mosquito measures and works, weekly or fortnightly searches were made at:—

Penang Island.—(Hill Station, the Waterfall Gardens, Aier Etam and Tanjong Bungah Villages, by the Mosquito Inspector and by the District Sanitary Inspectors at the Villages of Bagan Jermal, Tanjong Bungah, Tanjong Uma, Batu Uban, Glugor, Batu Ferringhi and Sungei Nibong).

Pulau Jerejak.—(Quarantine Station, Leper Settlement).

Province Wellesley.—(Villages of Butterworth, Prai, Bagan Tuan Kechil, Bukit Mertajam, and the adjacent Railway Reservoir area at Bukit Seraya, Nibong Tebal, Bukit Tambun and Simpang Ampat).

The Dindings.—(Lumut Village anti-malaria works).

(*g*) The blood of every coolie commencing work on the Hills Station was examined by the government pathologist. Any coolie with malaria parasites in his blood was compelled to take a course of quinine under the personal supervision of the Hills dresser. Of 547 thus examined parasites were found in 27.

(*h*) The temporary dispensary (housed by kind permission of the manager of the Penang Hills Railway in the engine room at the upper station) was open daily throughout the year. Of the 1,413 cases treated 129 were transferred to Penang Hospitals of whom one died.

(*i*) Routine Inspections of estates were continued throughout the year. The following table shows the number of "Estates" of 25 or more acres in the various districts.

Penang, North-eastern District	12
Penang, South-western District	9
Province Wellesley, Northern District	33
Province Wellesley, Central District	74
Province Wellesley, Southern District	84
Dindings	15
Total ...	227

F. R. SAYERS,
Senior Health Officer, Penang.

MALACCA.

By Dr. J. W. Scharff, d.p.h.

1. Dr. J. W. Scharff arrived in the Settlement on the 23rd of June, and took over the duties of Health Officer from Dr. R. B. MacGregor on the same day.

2. The duties of Health Officer in Malacca comprise two separate appointments, namely, Municipal Health Officer, and Health Officer Rural.

The former includes the sanitary control of a population of 35,935 in a densely crowded area of 3·5 square miles, and the latter concerns an area of 716·5 square miles with an estimated population of 136,455. This report includes comparative statistical details for the whole Settlement.

3. *Staff.*—There are six sanitary inspectors of whom one attended a course of instruction in Singapore, two others were severely injured in motor cycle accidents, and a successor has been found for a fourth who resigned.

4. For purposes of health administration the Settlement outside Municipal limits is divided into 5 districts each comprising approximately 140 square miles as follows (1) Central (2) Merlimau (3) Jasin (4) Alor Gajah and (5) Sungei Bharu.

Each of these districts includes one or more villages with a population of more than 1,000.

5. *Statistics.*—(*a*) The following tables show the population, deaths, births and infantile mortality rates for the years 1922 - 1925, inclusive: —

Year.	*Estimated Population.*	*Deaths.*	*Death-rate.*	*Births.*	*Birth-rate.*	*Infantile mortality.*
1922 ...	157,240	4,128	26·25	4,992	31·75	225·96
1923 ...	160,886	4,341	26·98	5,461	33·95	258·70
1924 ...	170,294	4,299	25·24	5,834	34·26	253·34
1925 ...	177,010	4,046	22·85	5,798	32·76	226·46

Both the total deaths and infantile mortality rates show a marked reduction in the year under review.

(*b*) A comparative analysis of the death-rates, birth-rates and infantile mortality rates in (1) The Municipal area, in (2) The large rubber estates, and in (3) The Rural area (exclusive of these estates), are of interest. They particularly emphasise the need for the child welfare work in town. The higher death-rate in the country, though reduced from that of the previous year, is a notable feature. The figures for the large rubber estates are less satisfactory than would appear in comparison to the remainder of the settlement, because the labour on estates is mainly a floating population of able bodied Tamils and Chinese.

	Death-rate.		*Birth-rate.*		*Infantile. Mortality rate.*	
	1924.	*1925.*	*1924.*	*1925.*	*1924.*	*1925.*
(1) Malacca Municipal Area ...	21·92	22·09	30·68	29·80	319·2	278·24
(2) Large Rubber Estates ...	24·99	22·07	25·66	27·97	206·7	223·14
(3) Malacca Rural Area ...	26·16	23·11	35·84	33·79	240·5	213·05

(*c*) The deaths from malaria and unspecified fever occurring in the Settlement show a steady decline during the past five years; the variation in the individual columns shows an inaccuracy of the diagnosis of death, that is well known, and which constitutes one great obstacle to accurate statistical information.

Year.	*Deaths reported* as *due to Malaria.*	*Deaths reported as due to fever unspecified.*	*Total.*
1921	834	753	1,587
1922	765	769	1,534
1923	440	1,039	1,479
1924	868	532	1,400
1925	1,114	264	1,378

(*d*) The monthly chart of mortality from malaria and unspecified fever shows a very distinct rise in May, and corresponds in general with the recognised seasonal variation of the virulent malaria-carrying-mosquito (Anopheles Maculatus).

(*e*) A clue to the health conditions of various parts of the rural area is obtained from the register of births and deaths at the Police Stations.

The normal ratio of births and deaths in the country, is 1·5 (or 15 births to 10 deaths). Wide variations from this normal figure are found to occur in Tebong (5 births to 10 deaths) Relau (8 births to 10 deaths) and Machap (9 births to 10 deaths). The spleen rate in a school in Machap is mentioned in Item 11 of this report. Tebong and Relau are both under suspicion as being very malarious.

6. *Infectious Diseases.*—There was no case of Cholera, Small-pox, Plague or Cerebro-spinal Meningitis.

There were 8 cases of Diptheria of which 7 were sent to the infectious diseases Hospital at Mata Kuching with one death. Thirty-one contacts were inoculated with antidiptheria serum.

Other notifications include:—

Chicken-pox	85 with no deaths.
Typhoid	6 with 3 deaths.
Erysipelas	2 with 1 death.
Small-pox	Nil.

The port of Siak in Sumatra was declared infected with small-pox on 23rd October; the constant intercourse of small trading vessels between this port and Malacca gave some cause for anxiety. For a period of six weeks watch was kept on all vessels arriving in the ports of Malacca. The crews and passengers were inspected, and allowed to proceed on parole after vaccination.

Leprosy.—Twenty-seven cases of leprosy were dealt with during the year; of these 17 were sent to the leper asylums and 3 died. Two early cases are being treated at Durian Daun Hospital as out-patients; they are in isolation under supervision.

Five cases who are isolated in the rural area, are treated by the travelling dispensary.

Vaccinations and re-vaccinations against small-pox were carried out as follows:—

Crews and passengers from Sumatra	247
Vaccinations in the rural and municipal area with the following results:—	7,858
Perfect	4,075
Failed	64

7. *General Sanitation, Scavenging of Villages.*—There are 17 scavenging coolies supervised by two sanitary overseers living at Alor Gajah and Jasin. They are employed by the Rural Board.

There are 6 toties engaged in the night-soil removal at P. Sebang, Alor Gajah and Jasin.

STRAITS SETTLEMENTS RURAL SANITATION CAMPAIGN.

Co-operation between the Health Branch, and the representative of the Rockefeller Foundation began early in March. The result has been to stimulate interest in the construction of sanitary latrines in the rural area.

Three thousand six hundred and eighty-nine dollars and thirty-one cents was spent on the purchase of a motor lorry, concrete latrines, etc.

Altogether 4,675 privies were inspected of which 2,323 were sanitary and 664 condemned. Forty-nine concrete block latrines were placed in Alor Gajah for demonstration purposes.

Hygiene Exhibit.—A Hygiene and Child Welfare Exhibit in connection with the Malacca Agricultural Show was held on September 12th and 13th and was attended by over 3,000 Malays, Tamils and Chinese. The exhibits included demonstrations of posters kindly lent by Dr. RUSSELL (International Health Board), ankylostome larvæ in culture, malaria parasites, and details of local anti-malarial measures. These were shown and explained to the public.

8. *Water Supply.*—The water supply of some villages, kampongs, and some of the rubber estates in Malacca, is not good. Eight samples were sent to the Government Analyst in Singapore and none proved satisfactory. Twenty-four samples were tested bacteriologically, and of these, fourteen were of good quality. I have recommended the provision of public wells, and estate wells in 12 instances, and have advised on a piped water supply to Jasin and Alor Gajah Villages.

9. *Police Stations and P. W. D. coolie lines.*—Each of these were visited on one or more occasions during the year. Reports on the unhealthy conditions of Relau Police Station, and the coolie lines at the 24½ mile Sungei Bharu and elsewhere were prepared.

10. *Dairies.*—There are 7 dairies on the outskirts of the Municipal limits, all of these have been inspected, and improvement effected in 5. Thirty samples of milk were taken and analysed, five were found adulterated, and the vendors prosecuted and fined $127.50.

11. *Piggeries.*—Licensed piggeries numbering 550 are located in the village areas in Malacca.

Nuisances arise from filthy odours, numerous mosquitoes and flies, straying pigs etc. Measures have been taken to remove all piggeries in the vicinity of the Malay kampongs at Klebang, and to improve others by enforcing the provision of the piggery by-laws.

12. *Anti-mosquito Measures.*—Twenty-five mosquito and spleen surveys were made, and a fairly complete record of anopheline mosquitoes within range of rural villages has been prepared in conjunction with the sanitary inspectors.

A spot map of residences of malaria cases coming to the Government hospitals and dispensaries was kept with the following result.

Census Areas.	*Population 1925 (Approx).*	*No. of cases treated at Govt. Hospt. and Outdoor Dispensaries.*	*Cases treated per 1,000 of population.*
Town ...	35,935	177	4·92
Central ...	45,453	56	1·23
Northern ...	47,811	278	6·02
Southern ...	43,191	476	10·67

The southern area with its foot hills along the edge of Mount Ophir is the most malarious.

Oiling and minor drainage work were carried out by 6 anti-mosquito coolie in 4 villages, and in the neighbourhood of the Hospitals, as well as in Crown land in town, but very little could be done owing to the smallness of the staff.

Co-operation between Asahan and Kemuning Rubber Estate, with regard to oiling on Crown land near the boundary of these estates, has been useful in reducing the incidence of malaria in small villages at these places. At Pulau Sebang ravines near Tampin village in Negri Sembilan were similarly treated.

Cost of anti-malarial work 1925.	$ *cts.*
Oil and Sundries	740 65
Quantity of oil used 1,170 gallons	
Expenses in connection with co-operation of estates, etc.	735 35
Expenses of transport	348 00
Expenses of coolies wages	872 12
Total ...	$2,696 12

13. *Rubber Estates.*—An agreeable feature of the estate work in Malacca is the helpful co-operation between the Health Officer and the Medical Officers of the Malacca Agricultural Medical Board. In this connection mention is made of 7 visits to estates in the company of these Medical Officers, and there were a number of consultations over questions concerning estate sanitation and drainage. There are 26 large rubber estates sending in health returns. The vital statistics of each of these estates are tabulated below. There is unfortunately a tendency on some estates to attribute sickness among coolies to diseases such as P. U. O. Simple fever, Pyrexia, etc.; this tends to cloak a true picture of the actual health conditions on these estates.

Summary of Estate Returns from 26 Rubber Estates, 1925.

Mid-year Population of coolies and dependents.	*Births.*	*Deaths.*	*Infant Deaths.*
8,652	242	191	54

Birth-rate.	*Death-rate.*	*Infant Mortality rate*
27·97	22·07	223·14

Number of in-patients in Estate Hospitals.	*Number of patients transferred to Government Hospitals.*	*Number of Out-patients.*
5,101	207	20,472

In-patients per 1,000 per annum.	*Out-patients per 1,000 per annum.*
589·6	2366·2

J. W. SCHARFF,
Health Officer, Malacca.

School Hygiene.

It is estimated that in Singapore there are 25,774 children of the school age. To deal with this large number of children there are in the Settlement 28 Government English and Vernacular Schools, 13 Government Aided Schools and 37 Private Schools.

The medical and health control of these institutions is vested in a section of the Government Health Branch. The duties of it were carried out during the year by one part-time Health Officer. The number of boys examined amounted to 2,791 as against 2,410 in the previous year. These examinations showed 78·7 per cent to have good general condition. 13·3 per cent had a generally fair condition and 11·1 per cent with distinctly poor condition. The following is a resume of some of the School Health Officer's findings. In some of the schools, the cleanliness of the small boys leaves much to be desired.

Several other conditions are of paramount importance: one is eye-sight, generally speaking including errors of refraction and to a lesser extent eye-disease. Errors of refraction was found in 4·4 per cent of the students examined, in one or both eyes. The School Medical Officer was at some pains to arrange for facilities for the treatment of this condition; and after considerable trouble, he was able to make agreement with a Singapore firm for the supply of simple spherical glasses including frames for the ridiculously small sum of $1. The boys with defective vision were advised to have this corrected, but the response was small.

Of eye-diseases, Trachoma is the only one which needs be mentioned. There was 40 cases of this condition, and Dr. Dexter Allen very kindly offered to treat these cases.

With regard to dental caries, 47·4 per cent of the pupils examined showed defective teeth. The School Health Officer made arrangements with a Japanese dental surgeon, by which school children could have extractions done for 50 cents, temporary fillings for 25 cents, and permanent fillings for $1.

Amongst the children attended to at the Government Dispensary at North Canal Road, the following were the principal diseases found:—

Scabies	84
Eczema	89
Tonsillitis	47
Pharangitis	28
Catarrh	64
Constipation and Dyspepsia	41

Of the surgical conditions treated at the same Dispensary amongst school children sent there were:—

Wounds	61
Abscess	30
Ulcers	187
Ear Diseases	96
Boils	43

Although to only a small extent, the year has shown that the sanitary conditions in the schools of the Colony are gradually improving.

Some details of school Hygiene in all the Settlements are given in Appendix *K*.

HOUSING AND TOWN PLANNING.

Improvement Schemes are being worked out in the Municipalities of Singapore, Penang and Malacca, and the necessary land is being acquired and laid out.

A sum of ten million dollars is to be appropriated for the scheme in Singapore.

An Ordinance to provide for the improvement and development of towns and other areas is now under consideration.

The overcrowding in parts of all the municipal areas is acute.

MEASURES TAKEN TO SPREAD THE KNOWLEDGE OF HYGIENE AND SANITATION.

1. Hygiene and Child Welfare Exhibitions were held in Malacca and Province Wellesley, and a Baby Show in Singapore—great interest was aroused amongst the population.

2. Dr. MILFORD BARNES and Dr. PAUL RUSSELL of the International Health Board of the Rockefeller Foundation arrived in Singapore on 24th February and from that date until the end of September, conducted a Preliminary Survey of Hookworm Infection and Rural Sanitation in the Straits Settlements, with a view to the institution of a Joint 3 years' Hookworm and Sanitation Campaign by their Board and our Government from the commencement of the year 1926. Pamphlets were issued in the vernacular and lectures were delivered in every settlement on the causes and prevention of Ankylostomiasis and Bowel Diseases. Lantern slides and specimens were shown. It is believed that much good has resulted from these efforts.

3. Elementary hygiene is now taught in all Schools.

TRAINING OF SANITARY PERSONNEL.

The sanitary inspector is to a Health Service what a sergeant is to the army, its backbone. On him depends the daily routine for carrying out health duties.

With the development of rural sanitary work, it became obvious in 1921 that the Government should have a proper staff of sanitary inspectors. A lecture-room, small museum and various offices and store were fitted out at Jalan Klapa. The collaboration of the Royal Sanitary Institute of London was fortunately obtained; and, in accordance with its practice in suitable tropical centres, the Institute agreed that students locally trained on an approved schedule, should be able to obtain the Sanitary Inspectors' Diploma of the London Institute after an examination by an approved Board of Examiners in co-operation with the Government of the Straits Settlements. This facility was much appreciated; for, it meant that not only the comparatively few students destined for Government services would be catered for, but, at the same time, without much expenditure, members of the public might be admitted to the course on payment of the necessary fees. The school has throughout been under the charge of Dr. GILBERT BROOKE. The first session began in May 1921, and was attended by five selected candidates for Government Service.

In 1922, 7 candidates attended the second session, of whom three were successful at its conclusion. In 1923, ten students attended the course, of whom 3 passed; in 1926, 26 students attended the course; the successful ones numbered 11. A fifth training course took place during the year under review. The number of candidates amounted to the large total of 43, of whom 36 sat for the Royal Sanitary Institute Examination. Twelve candidates were successful in obtaining the diploma after the usual examination in Hygiene, Sanitary Engineering, Veterinary Science, Chemistry and Physics. This class proved too large for successful handling; and, it is proposed in future to limit the number of candidates to about 20, including those from the Government Administration, and to endeavour to secure candidates of local birth and education in preference to men coming from countries outside Malaya solely for the training and examination.

IV.—KING EDWARD VII COLLEGE OF MEDICINE, SINGAPORE.

Electoral Board.—During the year 1925, the deaths have occurred of Mr. SEAH LEANG SEAH SEAH and Mr. WEE KAY SIANG, members of the Electoral Board.

The Council.—Dr. M. J. RATTRAY nominated by the British Medical Association, Malaya Branch, as their representative in succession to Dr. CHEONG CHEE HAI was appointed to serve on the Council for a period of three years.

The Senate.—Dr. J. S. WEBSTER, Professor of Medicine went to Japan as delegate to the Sixth Congress of the Far Eastern Association of Tropical Medicine; on the conclusion of the Congress he went on leave. Dr. R. B. MACGREGOR and Dr. .J C. TULL successively performed the duties of the Professor of Medicine.

Mr. K. BLACK, Professor of Surgery went on leave, Mr. A. D. WRIGHT being appointed acting Professor.

Dr. J. BAEZA was appointed Lecturer in Biology on the resignation of Mr. N. SMEDLEY.

Dr. E. R. STONE, Lecturer in Mental Diseases and in Forensic Medicine, and Mr. G. W. CRAWFORD, Lecturer in Pharmacy, went on leave; Dr. J. C. CARSON and Mr. A. J. TURNER respectively were appointed to act during their absence.

Junior Teaching Staff.—Dr. V. H. NORRIS, Tutor in Clinical Medicine, was awarded a Rockefeller Foundation Fellowship, and proceeded to the United States of America for a year's post-graduate study. Dr. E. W. D'CRUZ was appointed to act in his place.

Mr. W. A. NICHOLAS and Mr. S. W. PONNAPPA, assistants in Physiology and Anatomy respectively, left the College on transfer, and were replaced by Mr. S. R. SALMON and Mr. B. J. ESS.

Students.—Thirteen students completed their course and passed final examination for the Diploma of L. M. S.

The total number of licentiates at the close of the year was 189.

There were at the close of the year 98 students in residence. These were distributed amongst the successive years of study as follows:—

First year	25
Second year	30
Third year	6
Fourth year	18
Final year	19

Of these, 3 are Straits Settlements, and 24 are Federated Malay States, government students. Thirteen are scholars, and 18 exhibitioners.

Of the thirteen students suspended for breach of discipline, who proceeded elsewhere for medical study, ten have obtained the Scottish Triple Qualification.

Discipline.—Discipline during the year 1925 has, on the whole, been satisfactory.

Buildings.—The transfer of the work to the New Building began in November, and at the close of the year, most of the departments were at work in their new quarters. The conversion of the Tan Teck Guan building into the Anatomy school is not yet complete.

The old Chemical Laboratory has been transferred to the Government Analyst.

Endowments.—A draft for three hundred and fifty thousand dollars, being the contribution of the Rockefeller Foundation to the endowment of the Professorships of Biochemistry and Bacteriology, was received in May. It is hoped that the appointments will be made early in 1926.

V.—CHILD WELFARE AND MATERNITY WORK.

For a population like that of Singapore, of whom a large proportion are uneducated in public health matters and are indifferently housed, child welfare work is of great importance. The annual infantile mortality rate is a delicate index to the health of the community. In Singapore it was not until 1914 that the rate was ever below 300 although it had even then tended to decline for several years. The first effort to grapple with the situation was in October, 1910, when a municipal nurse was appointed to secure information regarding conditions of the early lives of the infants and to advise the mothers. A system of instructing and licensing midwives was also inaugurated by Government and two were so licensed in 1911 after passing an examination. In 1912 a second nurse was appointed by the Municipality; in that year the nurses paid 8,855 visits and saw 3,449 infants, while the midwives delivered 140 cases The Midwives Ordinance came into force in the Municipality on the 1st of July, 1917.

A new Midwives Ordinance constituting a Central Midwives Board was passed in 1923. Under its rules, registration is now compulsory within the Municipal Limits of Singapore, Penang and Malacca, and may be extended to rural areas when circumstances permit. All competent practising midwives were registered when the Ordinance was introduced. Further registration is confined to midwives holding the certificate of the home Central Midwives Board or other satisfactory certificate, or the Diploma or the Certificate of our Local Board, for which one year's training, and the passing of an examination of high standard are essential.

The number of registered midwives at the end of the year was—Singapore 320, Penang 130, Malacca 26, of whom a few were practising in rural areas.

In the year 1925, 4 European nursing sisters supervised the work of Asiatic midwives in Singapore. The Municipality now has two clinics, one at Prinsep Street and one at Kreta Ayer. In each of these a European sister is in charge, and to each 4 Asiatic health visitors are attached. In 1925, the European nurses paid 17,788 visits seeing infants to the number of 8,684 which amounts to over 70 per cent of the total births. Six thousand six hundred and sixty-five infants were being breast-fed; 1,767 were receiving tinned milk; while, of the mothers, 20 had been attended by medical men; 75 by A class midwives; 5,584 by B class midwives; 1,761 by C class midwives; the remainder were attended by friends or were unattended. The difficulties of the situation can be realised when it is remarked that of the 9,151 mothers seen, 8,085 were living in cubicles or single rooms.

Five thousand one hundred and seventy-two consultations were held by the European sisters on babies brought to the clinics for vaccination. A further 3,750 babies were brought to the clinics for advice and treatment; and on these a further 11,157 consultations were held.

As a supplement to this municipal work, a Child welfare Society was started in Singapore and opened its first clinic in September, 1924, at a house in Jalan Besar. A further clinic was opened in June, 1925, at Telok Ayer. Each centre is under the supervision of a Matron assisted by a trained midwife; and, in each case, qualified medical assistance is rendered several times a week. The work of this voluntary organisation, which is supported by public donations and has been given a government grant, is a highly important adjunct to the municipal effort. It aims not only to deal with the ailments of the infants who may be brought to the clinic and to help the mothers by advice, and by gifts of free milk when necessary (a facility made possible by the generosity of the Anglo-Swiss Condensed Milk Company), but also by visits, and various other methods of propaganda, to continue the work amongst children of Singapore between the age of infancy and school age. Four thousand four hundred and twenty-four children attended the Jalan Besar Clinic and 1,176 the Telok Ayer Clinic. It is hoped shortly to increase the number of health visitors and thus render it possible for the Society to carry out its programme to an even fuller extent. A play ground for children was instituted during the year at People's Park. It was equipped by the Singapore Municipality and a caretaker, provided by the Society, is in charge. When more facilities for play such as see-saws, swings, etc., are provided, it should prove a very useful adjunct to the work of the Society.

Lady GUILLEMARD has been the Society's President during the year, and the interest that she has taken in furthering its aims and objects and in helping in many different ways has been a valuable assistance during the early days of the Society's life. A baby show was held in April by the Society, which proved very successful. A large number of entries in all the classes were forthcoming, and the championship prize for infants under one, kindly presented by Lady GUILLEMARD, was won by a Japanese baby. The largest donation during the year was provided by the Hoe Thin Amateur Dramatic Society, which raised the handsome sum of $55,058 by means of theatrical performances and placed the Society on a sound financial footing for the first time.

Work in an allied direction is carried out by another voluntary Society called the "The Children's Aid Society" which, with the funds at its disposal, arranges for the board and lodging and education of a considerable number of children whose circumstances require it.

A Government Women's and Children's Out-Door Dispensary in charge of Lady Medical Officer C. H. DUKE, is maintained at Kandang Kerbau. The work done there was:—

Year.	*New-patients.*	*Repetitions.*	*Total.*
1924	7,572	16,543	24,904
1925	9,701	17,203	26,904

Four thousand eight hundred and eighty-six of the new cases in 1925 were children.

In Penang, midwives are supervised as in Singapore and a large amount of Child Welfare work is carried out by the Municipality.

Government had made provision for a Lady Medical Officer, part of whose time will be devoted to this work, in the 1926 Penang Estimates.

In Malacca a Child Welfare Clinic has recently been started by the Malacca Medical Mission, which also runs a Maternity Hospital.

GOVERNMENT MATERNITY HOSPITALS.

The numbers of women admitted to the 3 Government Maternity Hospitals in the Colony were:—

	Admitted.	*Delivered.*	*Gynæcological Operations.*
Maternity Hospital, Sepoy Lines, Singapore	736	616	80
Free Maternity Hospital, Kandang Kerbau, Singapore	714	588	48
Maternity Hospital, Penang	827	738	6

A children's ward of 12 cots was maintained at the Free Maternity Hospital, Singapore, to which 175 children were admitted of whom 130 were discharged cured or improved and 33 died.

VI.—HOSPITALS, DISPENSARIES AND VENEREAL CLINICS.

1. Total in-patients treated and mortality in all Hospitals of the Colony for the past six years:—

YEAR.	NUMBER TREATED.			NUMBER OF DEATHS.			PERCENTAGE OF DEATHS.		Percentage of deaths on total.
	1st and 2nd class wards.	3rd class wards.	Total.	European.	Asiatics.	Total.	European.	Asiatics.	
1920 ...	3,454	39,343	42,797	165	4,120	4,285	4·77	10·47	10·01
1921 ...	2,184	41,309	43,493	74	4,311	4,385	3·39	10·44	10·09
1922 ...	2,517	39,682	42,199	105	4,031	4,136	4·17	10·16	9·80
1923 ...	2,858	38,835	41,693	92	3,835	3,927	3·22	9·87	9·42
1924 ...	2,802	39,084	41,886	124	3,909	4,033	4·43	10·00	9·62

	Number treated 1st and 2nd class wards.	Number of deaths 1st and 2nd class wards.	Number treated 3rd class wards.	Number of deaths 3rd class wards.	Total 1st, 2nd and 3rd class wards.		Percentage of deaths 1st and 2nd class wards.	Percentage of deaths 3rd class wards.	Percentage of deaths on total treated.
					Cases.	*Deaths.*			
1925 ...	3,965	198	50,371	4,074	54,336	4,272	4·94	8·80	7·80

The total number of in-patients treated and the total deaths in the Hospitals of the Colony for some of the more important diseases are shown in the subjoined table with the corresponding figures for the preceding years.

—	1921.		1922.		1923.		1924.		1925.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Malarial Fevers ...	7,681	567	6,989	394	5,297	376	5,135	312	7,042	429
Dysenteries ...	1,452	490	1,497	605	1,566	454	1,387	373	1,296	366*a*
Diarrhœa and Enteritis ...	451	23	390	9	485	22	544	41	696	67
Beri-Beri ...	684	184	1,175	168	962	28	838	136	995	150
Tuberculosis ...	1,500	717	1,552	722	1,714	789	1,778	849	1,966	819
Enteric Fever ...	174	86	116	45	92	39	93	37	159	78
Ulcers ...	4,169	3	3,552	9	2,577	2	2,618	10	3,357	2
Venereal Diseases ...	4,319	44	4,421	140	4,194	56	4,362	145	4,721	109
Ankylostomiasis ...	1,944	278	2,155	163	2,508	124	1,887	120	4,499	123

(*a*)—Dysentery Amœbic ... ... 551 cases – 180 deaths.
,, Bacillary ... ... 506 ,, – 176 ,,
,, Unclassified ... ... 239 ,, – 10 ,,

3. The following terminal causes of death were noted in 381 fatal malarial cases.

Cardiac Failure	134
Coma	132
Hyper-Pyrexia	33
Cachexia	33
Liver Failure	29
Enteritis	8
Pneumonia	7
Nephritis	2
Peritonitis	2
Ruptured Spleen (spontaneous)	1
	381

4. The approximate daily cost of diets per head in the Colonial Hospitals was—

			$ c.
1st Class		Full diet	2 46
,,		Half ,,	2 33
2nd Class		Full ,,	2 14
,,		Half ,,	2 33
3rd Class	Chinese	Full ,,	0 26
,,	,,	Half ,,	0 40
,,	,,	Milk ,,	0 32
,,	Tamils	Full ,,	0 26
,,	,,	Half ,,	0 40
,,	,,	Milk ,,	0 30
,,	Sikhs	Full ,,	0 37
,,	,,	Milk ,,	0 46
,,	Bengali	Full ,,	0 38
,,	,,	Milk ,,	0 48

OUT-DOOR DISPENSARIES.

Year.	*Total Patients.*	*Total Attendances.*
1925	154,420	273,841
1924	96,284	167,934
1923	74,343	139,656
1922	58,005	99,488

There was an increase in out-patients in every Settlement.

The travelling dispensaries in Malacca and Province Wellesley, treated 9,417 and 8,639 out-patients respectively in rural areas: the latter dispensary was only in operation for the last six months of the year.

A total of 12,826 persons treated out-door received 18,669 injections for Yaws. Neosalvarsan and Sulpharsenol were the drugs used.

Venereal Clinics.

The total out-patients treated numbered 20,089, against 18,994 in 1924 and 6,476 in 1923.

No whole time staff was available for these clinics, which worked up to the limit of their capacity.

The drugs used were:—

1. Syphilis ...	(*a*) Intravenous —	Neosalvarsan Sulphoxylsalvarsan
	(*b*) Intramuscular —	Bismuthstab Luatol Olesal Eparsenol
2. Gonorrhœa ...	(*a*) By injection —	(1) Sulpharsenol (2) Gonococcal Vaccine (3) S. U. P. 36 (4) S. U. M. 36
	(*b*) By irrigation —	(1) Acriflavine (1 - 5,000) (2) Acykal (3) Mucosan (4) Oxycyanide of Mercury.

The majority of syphilitic patients ceased attendance as soon as their symptoms were ameliorated.

A comprehensive scheme, providing for a Social Hygiene branch of the Medical Department with two whole time European Medical Officers and a number of Assistant Surgeons and subordinates was drawn up in July 1925, and has since received the general approval of the Secretary of State for the Colonies. Under it several whole time clinics will be operated in 1926, and propaganda will be undertaken to attract and retain patients.

Buildings.

1. In the New General Hospital, Singapore, one first class block of 52 beds was occupied. The third class female block and two further third class male blocks of 80 beds each were also occupied. Last year a second class female block, and 2 third class male blocks of 80 beds each were taken into use. Of the 532 beds in the blocks opened to date, few are ever empty.

The administration block and operating theatres were ready at the end of the year. It is anticipated that the whole of the buildings will be completed by the middle of 1927.

2. The erection and furnishing of the new College of Medicine, Singapore, was finished during the year.

3. Good progress was made with the buildings of the new Female Leper Settlement, Singapore.

4. In Malacca the new District Hospital at Alor Gajah was opened, and the new District Hospital, Jasin, was begun.

5. In Penang, additions to the Maternity Hospital were advanced; the construction of small maternity wards at the 3 District Hospitals in Province Wellesley was also undertaken.

6. Ward accommodation for 240 additional lepers was completed at Pulau Jerejak and a beginning was made on the construction of a reservoir to serve the area where huts are to be built.

VII.—PRISONS AND ASYLUMS.

A.—PRISONS.

(*a*) SINGAPORE PRISON.

1. The health of the prisoners was satisfactory and the sanitary condition of the prison was good.

2. The water carriage system of sewage disposal has worked satisfactorily during the year.

3. *Admissions to Prison Hospital.*—There were one thousand and seventy-four admissions, including four Europeans and ten Eurasians. This with twenty-one who remained from the previous year gives a total treated of one thousand and ninety-five. The average daily sick was 33·02 as against 31·24 in the previous year.

4. The principal diseases treated were:—

Dysentery Amœbic ...	29	Broncho-Pneumonia ...	21
,, Bacillary ...	32	Pulmonary Tuberculosis ...	27
Influenza	24	Dyspepsia	76
Malaria	20	Diarrhœa and Enteritis ...	106
Pneumonia	13	Intestinal Colic	51
Venereal Disease ...	96	Abscess	39
Heart Disease	34	Injuries	48
Bronchitis	42		

Most of the Dysentery cases were relapses of disease contracted prior to admission into Prisons.

5. *Deaths.*—There were fifty-one deaths in the Prison Hospital giving a death-rate of 4·65 per cent.

6. *Causes of Deaths were*:—

Dysentery Amœbic ...	10	Bronchitis	1
Dysentery Bacillary ...	10	Broncho-Pneumonia ...	2
Dysentery Mixed ...	1	Pulmonary Tuberculosis ...	7
Pneumonia	3	Enteritis	4
Syphilis	1	Cirrhosis of Liver ...	2
Cerebral Hæmorrhage ...	4	Brights Disease	1
Heart Disease	4	Ankylostomiasis	1

7. Thirty-two cases—(31 criminals and 1 Banishee) were transferred to the General Hospital for Major operations. Of these three died, *viz*:—

Nephritis	1	General Peritonitis ...	1
Fracture of Skull ...	1		

8. One hundred and fifty-one vagrants suffering from serious complaints were transferred to Tan Tock Seng Hospital for treatment. Of these twenty-three died.

9. Three prisoners (2 criminals and 1 vagrant) were transferred to the Leper Asylum.

10. Seven criminals and eight vagrants were transferred to the Lunatic Asylum.

11. Two deaths occurred in the cells of prison:—

One a Chinese vagrant from cerebral hæmorrhage and the other a Chinese banishee from cardiac failure due to chronic nephritis.

12. *Suicides by Hanging.*—There were three:—

Two criminals and one vagrant.

13. *Executions.*—There were ten—one Japanese, four Chinese, one Malay, one Sikh and three Indians.

14. The figures for the different classes of Prisoners are shown in the following tables:—

	Criminals.	*Civil.*	*Vagrants.*
A. Total population in prison ...	3,213	4,228	588
B. Average daily number in prison	957	171·30	68
C. Total treated in prison hospital	944	71	80
D. Percentage of C to A ...	29·38	1·67	1·36
E. Total deaths in hospital ...	46	4	1

(*b*) Penang Prison.

1. The sanitary condition of the prison and the health of the prisoners were satisfactory throughout the year.

2.—(*a*) There were 12 cases remaining in hospital at the beginning of the year and 240 cases were admitted during the year—making a total of 252 cases treated in all as compared with 260 cases in 1924.

(*b*) The daily average of sick for the year was 18·12 as compared with 16·59 of the previous year.

(*c*) The principal diseases treated among in-patients were:—

Malarial Fever	11	Diarrhœa and Enteritis ...	36
Venereal Diseases ...	29	Injuries	13
Dysentery, Amœbic ...	4	Ankylostomiasis	20

(*d*) Three deaths occurred during the year with a death-rate of 1·9 as compared with 17 deaths and a death-rate of 6·53 of the previous year.

The causes of deaths were:—

Chronic Dysentery	1
Anæmia	1
Valvular Disease Heart	1

(*e*) Forty-nine vagrants were admitted to hospital during the year—2 deaths occurred among vagrants.

(*f*) Of the total number admitted to Prison during the year—895 were criminals and 138 vagrants.

(*g*) Two thousand and fifteen cases were treated as out-patients during the year as compared with 2,340 in the previous year. The average daily attendance was 42.

(*h*) There were 3 cases of judicial hanging during the year.

(*i*) Seven hundred and sixty-two specimens of blood were taken for the Wassermann Test. Three hundred and seventy-three gave a positive result.

(*c*) Malacca Prison.

The General health of the prisoners and the sanitary conditions in the prison were satisfactory.

The daily average number of inmates was:—

Prisoners	95·00
Remands	6·58
Vagrants	2·26

There were 42 admissions to the prison hospital with one death.

The daily average number of sick was 1·11.

There was one execution (Chinese).

B.—SINGAPORE LUNATIC ASYLUM.

1. There remained on 31st December, 1924, four hundred and ninety-six males and ninety-seven females.

Two hundred and ninety-one males and ninety-seven females were admitted.

The total treated was nine hundred and eighty-one.

2. Of the admissions 17 males and 6 females had previously been under treatment in this asylum.

3. Of the total treated 93 males and 26 females were discharged as recovered; 21 males and 16 females as relieved; 8 males and females as not improved; 15 males and 1 female absconded; 103 males and 31 females died.

4. Of the 8 males and 3 females discharged as not improved 7 were handed over to care of friends to proceed to China and India.

5. There remained on the 31st December, 1925, five hundred and forty-four males and one hundred and seventeen females.

6. The average daily numbers were 517·32 males and females 105·40.

7. The maximum and minimum were respectively—Six hundred and seventy-one and five hundred and eighty-six.

8. The nationalities of the admissions were:—

	Males.	*Females.*
British	5	1
Other Europeans	—	1
Eurasians	4	2
Chinese	195	64
Tamils	53	9
Malays and Allied Races	29	19
Others	5	1
	291	97

9. The physical condition of those admitted was:—

	Males.	*Females.*
Good	129	41
Fair	70	38
Impaired	67	14
Greatly impaired	25	4
	291	97

10. Twenty-nine patients died within one month of their admissions.

11. As far as can be ascertained the main causes for Insanity during 1925 were (*a*) Constitutional—Malaria and privation, (*b*) Syphilis—there seems to be an increase in this direction, directly and indirectly, (*c*) Alcohol and drugs—Brandy and Cannabis indica, Opium also caused several cases, for the most part in-patients striving to give up the use of this drug, (*d*) Heredity.

12. The recovery rate for the year was 30·67 per cent.

13. *Criminal Population.*—There remained on 31st December, 1924:—

(*a*) Criminal Lunatics ... Males 34 — Females 0
(*b*) Lunatic Criminals ... ,, 13 — ,, 6 - 53

During 1925:—

	Males.	*Females.*
(*a*) Number of Criminal Lunatics admitted ...	5	2
(*b*) Number of Lunatic Criminals admitted ...	15	1
(*c*) Number whose sentence expired ...	—	—
(*d*) Number who recovered and were returned to prison	11	1

One of the males was transferred to the Leper Asylum, and one discharged to court where he was released to proceed to China.

	Males.	*Females.*
(*e*) Number who died	5	—

There remained on 31st December, 1925:—

(*a*) Criminal Lunatics ... Males 17 — Females 2
(*b*) Lunatic Criminals ... ,, 34 — ,, 6 — 59

14. *Mortality.*—The chief causes were General Paralysis of the Insane, Bacillary Dysentery and Tuberculosis.

15. *Industries.*—Nine thousand nine hundred and eighty-four yards of cotton cloth were woven by the male patients from which clothing and bedding were made for the use of the patients.

16. *Revenue.*—$11,550.02.

17. The garden furnished 38,175 lbs. vegetables, 139 bunches of bananas and also soursops and sugar cane.

18. It will be seen from the figures for 1925 that there is an increase in the number of insane people especially females. Whether this is due to an increase in insanity or consequent upon an increasing population can only be estimated when census figures are available.

VIII.—METEOROLOGICAL.

It is generally recognised that the record of meteorological conditions is an important branch of public health. The information in various districts is of value not only from the health point of view, but also to local shipping, to the agriculturist, to the planter, to the aeronautical traveller, and to the scientist. Work was begun in this direction soon after the foundation of Singapore.

In 1840, Second-Lieut. Charles Morgan Elliot of the Madras Engineers, a younger brother of Sir HENRY MEYERS ELLIOTT, Foreign Secretary to the Government of India, was sent to Singapore to establish a magnetic observatory. The site selected was in the neighbourhood of the bridge, near the mouth of the Kallang River. Here, magnetic observations were taken, and observations of rainfall and temperature were begun for the first time.

Mr. ELLIOT'S other observations in different parts of the Archipelago and all his results were published in the transactions of the Royal Society, of which he was made a Fellow. He later returned to the East, where he died in 1852. After his departure, there was a considerable hiatus in the scientific observations; and it was not until 1862 that definite records were kept continuously up to the present time. In 1869 the Medical Department took over the recording of the rainfall, temperature, humidity and barometer. Since then the records have been taken by Assistant Surgeons. One of them, Mr. LEICESTER, went to Calcutta in 1881 to learn the work. A chart of the rainfall in Singapore taken continuously since 1862; and a chart of monthly rainfall distribution indicating the wettest and driest months since 1869, have been provided by Dr. GILBERT E. BROOKE.

In reviewing the meteorological conditions for the year 1925 there is little of outstanding interest to record. The mean temperature of Singapore was 79·4° F; for Penang 80·9° F; for Malacca 82·4° F, and for Province Wellesley 81·1° F. The wettest month in Singapore was that of January, with a rainfall of 489·99 mm. The driest month was July, with a rainfall of 106·09 mm. Perhaps the most remarkable thing is the preponderance of the South Easterly (Java) wind during the month of April, May, June, July and September, thus curtailing the usual South-Westerly prevalence which, as a rule, blows from the month of June to October. The mean solar maximum on the grass was 77·2° F. The mean shade maximum was 86·8.

The total rainfall in Singapore amounted to 259·32 mm. The mean relative humidity was 81 per cent; the greatest humidity being shown in the month of December at 86 per cent. It is a strange feature that practically through all Malaya, although the relative humidity is comparatively high throughout the whole year, it very quickly rises after sunset on almost every night of the year, attaining a maximum of 98 and 99 per cent through the night. On one occasion at least during the year a strange dry spell was noticed for a few hours: This has occurred on at least half-a-dozen occasions in the last 20 years. The humidity rapidly declines to about 48 or 50 per cent. Books lying on a table will have their covers curled, and everything feels dry to the touch. The reason for these short spells of dryness is hard to understand. They generally come during a South-easterly Java wind, and they seldom last for more than three hours.

An effort to bring the conditions to the notice of the inhabitants was made by furnishing the most important data to the 3 European papers daily. It is gratifying to note that the reports are displayed in a suitable part of the paper, where they can catch the eye without difficulty.

A further effort has been made to inform the public of the weekly condition of the various hill stations in the neighbourhood. The returns from Garoet in Java, and Brastagi in Sumatra, are a weekly mean of returns taken during several years' past, since it is impossible to obtain a weekly telegram without payment. The returns from Penang Hill, Taiping Hill and Fraser's Hill are telegraphed to the department each week.

IX.—SCIENTIFIC.

The following reports are attached as appendices.

A. Report on Leper Asylum, Singapore.

B. Report on Treatment of Leprosy in Penang Leper Institutions.

C. Report on the Pathological Branch, Straits Settlements.

D. Report on the Government Analyst's Branch, Straits Settlements.

E. Report on Preliminary Survey of Hookworm Infection and Rural Sanitation in the Straits Settlements.

F. Report on Tan Tock Seng Hospital, Singapore.

G. Report on Treatment of Scabies by the Danish Method.

H. Report on the treatment of Opium Habit.

I. Report on Women's and Children's Dispensary Kandang Kerbau, Singapore.

J. Report of the Radiologist, Singapore.

K. Reports on Schools.

A. L. HOOPS,
Principal Civil Medical Officer,
Straits Settlements.

APPENDIX "A".

Leper Asylums.

I.—LEPER ASYLUM, SINGAPORE.

Report by Dr. E. D. Lindow, M.R.C.S., L.R.C.P.

1. Male Leper Camp at McNair Road—

Remained on 31st December, 1924	48
Admitted during 1925	107
Discharged during 1925	7
Transferred to Pulau Jerejak	91
Absconded	11
Died	10
Remained on 31st December, 1925	36

Immediate causes of Deaths—

Pulmonary Tuberculosis	2
Sapraemia (Septic ulcerations)	5
Hepatic Cirrhosis	1
Chronic Bacillary Dysentery	1
Advanced Leprosy	1

2. Female Leper Camp at Kandang Kerbau (Temporarily)—

Remained 31st December, 1924	49
Admitted during 1925	4
Discharged	—
Transferred or absconded	—
Died	12
Remained 31st December, 1925	41

Immediate Causes of deaths— ...

Pulmonary Tuberculosis	4
Sapraemia (Septic ulcerations)	3
Chronic Interstitial Nephritis	2
Acute Nephritis	1
Chronic Bacillary Dysentery	1

3. Return of Injections Administered—

	Males.	*Females*
Sodium Hydnocarpate	1,751	398
E. C. C. O.	666	685
Oscol Stibium	70	57
N. A. B. Injections	212	285
Ol. Hydnocarpus Wightiana	1,582	782
Sulpharsenol	117	235

Results of Treatment—

Cured	7	—
Definite Improvement	2	5
Slight Improvement	12	9
No Improvement	18	22
Getting Worse	4	5

4. Treatment.

The results show a marked improvement on previous years in the male camp, but little progress is, unfortunately, to be reported in the female camp, which was overcrowded but will shortly be replaced by a roomy camp at Trafalgar.

The primary reasons for the improvement in the male camp are firstly, the reduction in numbers owing to more accommodation being available at Pulau Jerejak, and secondly to improved methods of treatment.

Dr. Muir visited both camps early in the year and his suggestions were adopted.

1. Treatment of intercurrent disease.

It has always been the practice to treat these conditions but more attention was paid to the eradication of syphilis than previously.

In connection with this disease, it is experienced that the condition is more difficult to treat when complicated by leprosy. Following arsenical injections, patients are very prone to reactions, and the doses have to be increased very cautiously.

2. *Exercise*.—Great importance is attached to this part of the treatment, and success was attained in this direction in the Male Leper Camp, but little help was obtained in the Female Leper Camp owing to the insufficient space available. Physical exercises were first attempted, but the patients found them somewhat irksome, consequently they were dropped and ball games introduced, which enabled the object to be attained.

3. Use of Ol. of Hydnocarpus Wightiana. Prior to the arrival of this drug, the same lines of treatment were adopted as for recent years.

(*a*) Sodium hydnocarpate 3 per cent solution was given in the Male Camp, intravenously as a routine. A few received E. C. C. O. injections, but this treatment was reserved for those patients in whom the veins had become obliterated or whose veins were too small.

(*b*) E. C. C. O. was given intramuscularly to all the females, with a few exceptions in which the infiltration method and intravenous route were tried. The latter were entirely discontinued quickly as the after effects were found to be very distressing. Reactions varies in intensity; the mildest form being characterized by general malaise, pyrexia, headache and vague pains in the bones. A certain percentage develope an erythematous rash, especially marked in the legs. The severe form shows much swelling of the nodules, the tissue becomes oedematous, and blebs and bullae containing clear fluid appear. This condition is very painful and distressing to the patient. In all cases symptomatic and local treatment, with temporary cessation of the drug, sufficed to relieve this complication.

(*c*) Later in the year a change was made in the treatment and pure oil of hydnocarpus was utilized, by the infiltration method into the nodules and patches themselves. The initial dose of 2·5 c.c. was given bi-weekly and an increase of 0·5 c.c. added every week. This oil being very thick requires a good deal of time and force to infiltrate the nodules and patches, this being more pronounced when the nodules or patches are old and sclerosed. The absorbability of the drug varies in different patients and is proportionate to the age of the nodules.

In certain patients the infiltrated patches resolve in 3 days: others take 7-10 days, while in some, instead of resolving a definite swelling persists, which is apt to become very tender and fluctuant. Infiltration into old and sclerosed nodules gives pain and in the majority of cases there is great liability to ulceration. In the matter of technique, it is found very difficult to infiltrate into any one site of puncture more than 2·5 c.c. of the oil, without causing pain and threatened ulceration of the over-lying skin. It thus required four sites of puncture to get 10 c.c. of the oil injected. As the result of this experience, it was decided to adopt the method of infiltration into healthy subcutaneous tissue. The body is mapped out into definite areas and these areas utilized successively.

By this means it is easier to inject larger doses, very little pain is experienced after the initial puncture, and the liability to ulceration is diminished.

The patients tolerate this drug exceedingly well and only a very few showed the mildest of reactions.

Mr. Chan Jim Swee was Assistant Surgeon in charge of both camps throughout the year, and I should like to record here my appreciation of the services he rendered.

APPENDIX "B".

TREATMENT OF LEPROSY AT PULAU JEREJAK.

BY DR. A. M. WHEATLEY, *Deputy Medical Officer, Leper Settlement.*

The main lines of treatment in 1925 *have been as follows* :—

1. *Hydnocarpus Wightiana Oil,* obtained from Ernaculum, South India. A pound of the oil is placed in a bottle and heated in a water bath to boiling point, one hundred grains of camphor is then added, and the bottle kept in the hot water till the camphor has dissolved.

Twice a week (Mondays and Thursdays) the oil is sterilized and injected, subcutaneously, commencing with 2 c.cs. and increasing by 2 c.cs. at each subsequent injection, to the point of tolerance, the average maximum dose being 6 c.cs. Up to 3 c.cs., it is injected in the subcutaneous tissue over the deltoid region, and above this dose into the loose subcutaneous tissue in the upper and outer quadrant of the gluteal region. Gentle massage of the injected area is always done, as it helps to distribute the oil evenly.

2. *Sodium Morrhuate.*—This is the Sodium Salt of Cod Liver Oil. It is made in a 3 per cent solution, with the addition of ½ per cent Acid Carbolic. It is given twice weekly (Mondays and Thursdays) instead of Hydnocarpus Wightiana Oil, intravenously, or subcutaneously. There is very little pain by the subcutaneous method and none by the intravenous.

Dosage: Commencing with 1 c.c. and increasingly by 0·5 c.c. at each subsequent injection to the point of tolerance. The average maximum dose has been 5 c.cs.

3. *Sodium Soyate.*—It is the Sodium Salt of the Soya Bean. It is given instead of either the Hydnocarpus Wightiana Oil or Sodium Morrhuate, strength, dosage and method as Sodium Morrhuate.

4. On non-injection days all cases are given internally either Hydnocarpus Wightiana Oil in capsules, commencing with 10 minim doses increasing if there is no nausea to 20, 30 and 40 minims of oil twice daily; or

5. As an alternative powdered Hydnocarpus Wightiana 3 parts with Indian hemp seed, 1 part, mixed (locally called Tai Foong Chee) is given in doses of 15, 20 or 30 grains twice daily.

6. Tai Foong Chee has also been given as the sole treatment to chronic cases. The results are beneficial, but there has been no complete disappearance of all lesions. It is helpful to advanced cases which are unsuitable for injection treatment.

7. *Crysalgan.*—A preparation of gold has been tried since October, 1925.

It is given intravenously every 10th day in the following dosage according to instructions in the explanatory pamphlet:—

Commencing dosage	0·01 gramme.
2nd ,, ...	0·25 ,,
3rd ,, ...	0·05 ,,
4th ,, ...	0·75 ,,
5th ,, ...	0·01 ,,

The results have been disappointing.

8. *Subcutaneous infiltration* with Hydnocarpus Wightiana Oil of leprous patches as described by Muir has been employed thus:—

> Select a leprous patch, introduce the hypodermic needle up to the hilt at one pole and inject a fraction of the oil. Withdraw needle but not completely, introduce it at a different angle and inject another fraction of the oil, repeat this twice more at other angles and then withdraw needle.
>
> Insert it now at the other pole of the patch and repeat the above procedure. Thus with two insertions of the needle, eight injections have been made.

There is some pain on injection with the oil, but it soon passes and the results are so beneficial that patients do not object to the temporary discomfort.

9. *For counter-irritation.*—Trichloracetic Acid 1 in 3 to 1 in 5 has been painted on lesions with good effect.

In some cases after application the skin lesions disappear rapidly, and swollen lesions in all cases become greatly reduced.

It may be painted on every 10th or 12th day. The right amount of painting is indicated by slight whitening of the lesion as the solution dries. It should not be overdone, otherwise the lesion ulcerates.

10. *All concurrent diseases* such as malaria, syphilis, hook-worm and dysentery are treated. This is most important.

11. *Skin Sanitation* is very important. All cases are encouraged to rub the whole body daily with Hynocarpus oil followed an hour after by a good bath. Those who have rigidly carried out this routine have improved more rapidly.

12. *Exercise* is encouraged and consists of vegetable planting, cutting of firewood, seabathing, walking, rowing, football, badminton, skipping and drill (Boy Scouts).

13. Every effort is made to keep the inmates cheerful.

Chinese, Tamil and English Bands and gramaphones are provided. English and Vernacular newspapers are also regularly supplied.

Poultry rearing, planting of vegetables, fishing and light work such as sweeping are encouraged.

14. All inmates are encouraged to accept treatment. Out of 831 inmates 636 were under treatment for the past year. Of this number 81 per cent were advanced cases.

15. *The following figures show the results of treatment with the various drugs:*—

(*a*) *Camphorated Hydnocarpus Wightiana Oil.*—		
Lesions disappeared	5	
Greatly improved	34	
Improved	175	
Not improved	41	
		255
(*b*) *Sodium Morrhuate.*—		
Lesions disappeared	1	
Greatly improved	5	
Improved	24	
Not improved	19	
		49
(*c*) *Sodium Soyate.*—		
Lesions disappeared	—	
Greatly improved	1	
Improved	12	
Not improved	8	
		21
(*d*) *Tai Foong Chee (only).*—		
Lesions disappeared	—	
Greatly improved	—	
Improved	211	
Not improved	80	
		291
(*e*) *Crysalgan.*—		
Lesions disappeared	—	
Greatly improved	—	
Improved	4	
Not improved	16	
		20
Total		636

16. The use of E. C. C. O. (Muir) has been abandoned.

17. The following are illustrative cases:—

1. UNG BOK.—Hokien, 44 years of age.
Duration of disease, 1 year.
Admitted on 10th January, 1924.

On admission, he was very debilitated and emaciated. Both ears were thickened. There were leprous patches on right cheek and right upper arm near elbow. There was anæsthesia of fingers.

He received in 1924, 36 intravenous injections of Sodium Morrhuate with a maximum dose of 5 c.cs. given twice weekly. He improved, but after 4 months of this drug, a stationary state set in. He was then placed on 5 per cent Thymol with E. C. C. O. (Muirs). He received 48 injections intramuscularly of this latter drug, the maximum dose being 5 c.cs. Internally Sodium Morrhuate grs. 3 thrice daily, increased by 3 grs. daily till 25 grs. per diem was being taken.

Daily inunctions with Chaulmoogra oil followed by a bath were also given. The lesions began to diminish and gradually disappered. There was still some anæsthesia of hands.

In 1925, he received 30 injections of Camphorated Hydnocarpus Wightiana Oil, commencing with a dose of 2 c.cs. and a maximum dose of 6 c.cs. twice weekly. Sensation then returned to fingers. Six smears from ears and nasal mucous membranes showed no leper bacilli and he was discharged on 25th March, 1925 and employed as a non-leper cook at the Settlement.

He continued treatment, taking Hydnocarpus Wightiana Oil internally mins. xv twice weekly till 30th June, 1925, when all treatment ceased.

On 31st December, 1925, he was free from all signs of leprosy, and nasal smears were negative.

2. CHONG CHIN.—Teochew, 45 years of age.
Duration of disease, 2 years.
Date of admission, 19th January, 1924.

Condition on admission very emaciated, ears very thickened. Skin of forehead slightly thickened. Faint roseolar patches on chest and back. Ulnar nerves were thickened but there was no loss of sensation. Nasal smears showed lepra bacilli.

In 1924, he received the following treatment:—

(*a*) Sixteen intravenous injections of Sodium Morrhuate. Maximum dose was 5 c.cs. There was no improvement.

(*b*) Nineteen injections of 5 per cent Thymol with E. C. C. O. intramuscularly, maximum dose 4 c.cs. There was no improvement.

(*c*) Twenty-eight injections of 5 per cent Thymol with Antileprol given intramuscularly. There was improvement with this drug, the lesions began to fade, and gradually disappeared.

This drug not being further available, he was put on Moogrol 19 injections intravenously, maximum dose being 1 c.c.

In 1925, he was put on Hydnocarpus Wightiana Oil receiving 12 injections subcutaneously—maximum dose 6 c.cs. On 26th January, 1925, he was free from all signs of leprosy, bacteriologically and clinically. He was discharged and has since been keeping quite fit and has been helping his father to work a vegetable garden.

3. CHOO KOOI.—Cantonese, 39 years of age.
Duration of disease, 1 year.
Date of admission, 5th May, 1924.

Condition on admission.—Thickened leprous patches on forehead, with thickening and enlargement of ears. Ulcers on feet. Both ulnar nerves thickened, loss of sensation in fingers. Numerous lepra bacilli in nasal smears.

Treatment given in 1924 was 84 injections of Sodium Morrhuate intravenously, minimum dose 0·5 c.c., maximum dose 5 c.cs. Inunctions daily with Chaulmoogra oil, and Sodium Morrhuate grs. 3 three daily, increased till 21 grs. thrice daily was being taken.

On 31st December, 1924, he was free from all clinical signs of leprosy except that sensation had not completely returned. Smears still showed lepra bacilli.

In 1925 he received 48 subcutaneous injections of Camphorated Hydnocarpus Wightiana Oil.

On 31st December, 1925, sensation had completely returned. Smears were still positive.

4. RAMALINGAM.—Tamil, 24 years of age.
Duration of disease, 2 years and 3 months.
Date of admission, 12th November, 1923.

Condition on admission.—A very sickly looking subject. Leprous patches on forehead. Both ears thickened and enlarged. Ulnar nerves tender and enlarged. Some anæsthesia of fingers. Smears showed numerous lepra bacilli.

Treatment.—

1923—5 per cent Thymol with Moogrol intramuscularly 11 injections.
1924—5 per cent Thymol with Moogrol intramuscularly 26 injections.
5 per cent Thymol with Antileprol intramuscularly 16 injections.
5 per cent Thymol with Moogrol intramuscularly 20 injections.
1925—Camphorated Hydnocarpus Wightiana Oil subcutaneously 85 injections.
Internally: Hydnocarpus Oil.

Condition on 31st December, 1925—Clinically free from all signs of leprosy. Bacteriologically smears from ear clippings positive.

5. F. BELL.—Eurasian, age 13 years.
Duration of disease, 1 year.
Date of admission, 6th August, 1923.

Condition on admission.—Leprous patches on ears with thickening. Faint patches on chest back and thighs. Roseolar patch on face said to be birth mark. Nasal smears positive for lepra bacilli.

Treatment.—

1923—3 per cent Sodium Hydnocarpate and Soyate intravenously 22 injections.
3 per cent Sodium Morrhuate intravenously 16 injections.
E. C. C. O. Muirs intravenously 14 injections.
5 per cent Thymol et Moogral intravenously 16 injections.

Some improvement but ears still thickened with leprous patches.

1924—Sodium Morrhuate intravenously 30 injections.
Sodium Soyate intravenously 26 injections.
1925—Hydnocarpus Wightiana Oil subcutaneously 49 injections.

Condition on 31st December, 1925.—Free from all clinical cigns of leprosy. Smears from ear clippings positive.

6. A. EBERT.—Eurasian, age 23 years.
Duration of disease, 3 years.
Date of admission, 30th January, 1923.

Condition on admission.—Both ears very thickened. Leprous tubercles on forehead, lips, chin and nostrils. Loss of sensation in feet. Numerous lepra bacilli in smears.

Treatment.—

1923—3 per cent Sodium Hydnocarpus and Soyate intravenously 32 injections.
Sodium Morrhuate intravenously 40 injections.
E .C. C. O. intramuscularly 16 injections.
10 per cent Thymol and Oleum Morrhuate intramuscularly 8 injections.

1924—E. C. C. O. by infiltration into patches and tubercles 26 injections.
5 per cent Thymol and Antileprol intramuscularly 16 injections.
5 per cent Sodium Morrhuate intravenously 43 injections.

1925—Sodium Morrhuate intravenously 26 injections.
Hydnocarpus Oil subcutaneously 62 injections.
Internally Hydnocarpus Oil ms. xx. bd.

Condition on 31*st December,* 1925.—Ears slightly thickened. Leprous tubercles as well as patches have all disappeared. Sensation has returned to hands and feet. Smears are positive.

7. Ah Kow.—Cantonese, age 29 years.
Duration of disease, 2 years.
Date of admission, 9th February, 1925.

Condition on admission.—Raised thickened patches on cheeks. Ears slightly thickened. Faint patches on back. Loss of sensation fingers. Both ulnar nerves enlarged and tender. Smears positive.

Treatment.—

3 per cent Sodium Morrhuate intravenously 20 injections.
Hydnocarpus Wightiana Oil intramuscularly 46 injections.

Condition on 31*st December,* 1925.—Ears normal, patches on cheeks disappeared. Sensation returned to fingers. Smears from ear clippings positive.

8: Ng Ah Seng.—Cantonese, age 36 years.
Duration of disease, 3 years.
Date of admission, 30th March, 1924.

Condition on admission.—Both ears thickened and ulcerated. Skin of forehead thickened. Raised leprous patches on cheeks. Large discoloured patches on abdominal wall. Smears positive.

Treatment.—

1924—Bismuth Tartrate intramuscularly 4 injections.
5 per cent Thymol Moogrol intramuscularly 50 injections.

1925—Sodium Morrhuate intravenously 86 injections.

Condition on 31*st December,* 1925.—Ears normal. No thickening of skin of forehead. Slight discoloured patches on chest wall still. Smears positive.

9. Tang Ah Chuan.—Teochew, age 30 years.
Duration of disease, 1½ years.
Date of admission, 6th July, 1924.

Condition on admission.—Large leprous masses on forehead extending on to nose and around right eye, and on to right cheek bone. Scattered nodules on face. No areas of anæsthesia. Smears positive.

Treatment.—

1924—3 per cent Sodium Morrhuate intravenously 36 injections. Slight improvement.

1925—Hydnocarpus Wightiana Oil subcutaneously 48 injections. Fresh nodules appeared on body after 10 injections and patient did not want to continue treatment, but as face lesions were disappearing, he agreed to try a little longer. The result was a rapid disappearance of face lesions and of the nodules on body.

Condition on 31*st December,* 1925.—Clinically free from all signs of leprosy, but smears from ear clippings are positive.

CASE I.

PHOTOGRAPH NOT REPRODUCED.

UNG BOK.

Admitted 10*th January*, 1924.

Discharged 25*th March*, 1925.

CASE 2.

PHOTOGRAPH NOT REPRODUCED.

CHONG CHIN.

Admitted 5th February, 1924.

Discharged 26th January, 1925.

CASE 3.

PHOTOGRAPH NOT REPRODUCED.

CHOO KOOI.

1925.

CASE 4.

PHOTOGRAPH NOT REPRODUCED.

RAMALINGAM.

31*st December*, 1924.

PHOTOGRAPH NOT REPRODUCED.

RAMALINGAM.

31*st December*, 1925.

CASE 5.

PHOTOGRAPH NOT REPRODUCED.

F. BELL.

31*st December*, 1925.

Case 6.

Date of admission 30th January, 1923.

PHOTOGRAPH NOT REPRODUCED.

A. EBERT.

1924.

PHOTOGRAPH NOT REPRODUCED.

A. EBERT.

1925.

CASE 7.

PHOTOGRAPH NOT REPRODUCED.

AH KOW.

1925.

Case 8.

PHOTOGRAPH NOT REPRODUCED.

NG AH SENG.

1925.

Case 9.

PHOTOGRAPH NOT REPRODUCED.

TAN AH CHUAN.
1924.

PHOTOGRAPH NOT REPRODUCED.

TAN AH CHUAN.

31st December, 1925.

FEMALE LEPER WARDS, JELUTONG.

REPORT BY W. A. TAYLOR, M.B., Ch.B., *Chief Medical Officer, Penang.*

1. Thirty-eight inmates remained in occupation of the Female Leper Wards at the beginning of the year—eleven Perak lepers and 27 Colonial lepers.

2. There were 10 admissions during the year—all the ten being from Colony—making a total of 48 treated in all.

3. Four deaths occurred during the year.

4. The average daily number of inmates for the year was 44·69 as compared with 39·28 of the previous year.

5. Thirty-one cases were under treatment with injections of sodium Morrhuate twice a week—in addition to oral administration of Chaulmoogra Oil in capsules and inunction of the oil The ulcerative lesions were being regularly treated with a mixture of chaulmoogra oil and iodoform and camphor. The Tai Foong Chee treatment (pulverised chaulmoogra seeds two parts to one part of hemp seeds mixed together) Grs. XV of this mixture was given twice daily to all the lepers.

6. *Buildings and Grounds.*—Necessary minor repairs to buildings were carried out during the year.

The adjoining vacant plot of ground is being cultivated by the lepers.

REPORT ON A LEPER CASE AT BUTTERWORTH, PROVINCE WELLESLEY.

A Eurasian girl age about 14 years, was brought to the Hospital by her father on 19th December, 1924 for medical advice regarding discoloured and itchy patches over the legs and arms which were noticed by her father on the return of her daughter from the Ipoh convent. Smears that were taken were positive for Leper Bacilli. She was admitted to the Butterworth Hospital on 27th December, 1924. She had chicken-pox 4 years previously. She had an attack of fever in June or July, which kept her in bed one week. Apparently no blood examination was made.. In April, 1924 the patient noticed that her legs were swollen but had no pain. In August 1924 the patient first noticed discoloured and puffy patches on the face below her eyes and later similar patches appeared on her limbs. There was no pain or loss of sensation until about one month prior to her admission to hospital, when itching commenced over the patches on the face, limbs, back and buttocks.

On admission she had numerous maculæ distributed over her whole body the eyebrows being not affected. These maculæ were paler than normal skin with raised edges of darker colour. The centres showed partial analgesia. The skin of the forearms and the legs below the knees was thickened and nodular. The lobes of the ears were slightly thickened.

Since she was admitted to the hospital she was given Tai Foong Chee in 25 grains doses twice daily after food. On 1st January, 1925 injection of E. C. C. Oil was started with an initial dose of 5 minims, bringing up to a maximum of 3 c. cs. on 21st January, 1925. The E. C. C. Oil was discontinued on 21st January, 1925 and the dose of Tai Foong Chee was increased to ½ drachm. Since 27th June, 1925 she had ½ cc. of Sodium Morrhuate given her bi-weekly but not continuously, two weeks rest being allowed at the end of a month. In spite of a rise of her temperature after several injections of Sodium Morrhuate she remained in good health up to the time of her discharge.

Several smears taken up to 3rd October, 1925 showed the presence of Leper Bacilli but in decreasing amount. On 3rd October, 1925 the smear taken proved to be negative. On the 9th another smear was taken which again proved negative. Two sets of four smears each were taken from different parts of the body, and they all proved negative.

The patient was examined on 27th December, 1924 for anæsthetic patches and the result is shown in chart 1. On 25th July, 1925 she was again examined with the result shown in chart 2. A third examination was made on 19th October, 1925 when she had a scattered patches as shown in chart 3. The last examination chart 4 made on the 12th December, 1925 showed a fairly large patch over the dorsum of her left foot involving the external terminal branch of the Musculo-cutaneous nerve and another patch above and internal to her right elbow involving the lesser internal cutaneous nerve.

The discoloured patches were every 14th or 15th day painted with Trichloracetic acid.

During the time she remained in hospital she was kept very hopeful and occupied.

The patient was discharged as non-infective on 24th December, 1925, on condition that she attended at the Butterworth Hospital for out-door treatment. (Charts not attached.)

APPENDIX "C".

Pathological Branch.

I. SINGAPORE.

Report by Dr. G. A. Finlayson, M.R.C.P., *Government Pathologist.*

Laboratory, Sepoy Lines.

Total number of specimens examined ...		3,834
Blood films—		
Malaria parasite present	4	56
,, ,, absent	51	
Differential count ...	1	
Blood Culture ...		16
Cerebro spinal fluid—		
Meningo coccus present ...	2	13
,, ,, absent ...	11	
Diphtheria—Throat or Nasal Swab—		
K. L. Bacillus present ...	9	59
,, ,, absent ...	50	
Examination of pus, etc., ...		32
Histological Sections ...		128
Smears for Gonococcus—		
Gonococcus present ...	40	145
,, absent ...	105	
Smears for B. Lepra—		
Bacillus present ...	3	19
,, absent ...	16	
Smears for T. Pallidum—		
Treponema present ...	6	20
,, absent ...	14	
Sputum for Tubercle Bacillus—		
Bacillus present ...	22	82
,, absent ...	60	

Fæces—		
E. Histolytica ...	14	
Bacillary Dysentery ...	8	
Ova present ...	43	
Negative to above ...	111	 191
Giardia Intestinalis ...	4	
Strongyloides Stercoralis	1	
Tape Worm ...	3	
B. Typhosus—negative ...	7	
Urine—Albumin casts organisms, etc. ...		 176
Vaccines prepared ...	...	 7
Widal reaction—		
1. B. Dysenteriæ, Flexner, positive		 1
2. Food poisoning—negative	...	 1
3. B. Typhosus—		
Positive ...	114	
Partial reaction ...	44	 387
Negative ...	229	
4. B. Para typhosus A.—		
Positive ...	2	
Negative ...	1	 3
5. B. Paratyphosus B.—		
Positive ...	3	
Partial ...	4	 7
Wassermann Reaction ...	...	 2,456

Positive	+ +	880
,,	+	177
,,	+	86
Negative	–	1,313

From Government institutions two or more samples of blood, withdrawn from each of some 62 cases were examined; 24 being "Continuation" from the previous year. In several instances a re-examination was requested; the specimen to be forwarded after the patient had received a provocative dose of an Arsenical Compound. It appears that 58 patients were kept under observation and treated by various preparations of Arsenic, Bismuth, Mercury, etc., for some considerable time.

At the end of the period of treatment the

W. R. remained unchanged	+ +	in 33
,, fell from	+ + to +	in 7
,, ,,	+ + or + to ±	in 11,

while in only seven did the reaction become quite negative.

Whether the reaction will remain negative can only be decided by further examination of the patients in the future. Of some 1,000 syphilitic patients treated during the year, it may be stated that only 0·7 per cent could be returned as cured.

WATER SUPPLIES.

Thirty samples of water were examined and reported upon, while on five occasions articles were forwarded by the Deputy Public Prosecutor for the precipitin test of human blood.

CENTRAL MORTUARY, SEPOY LINES.

Total number of autopsies at which protocols were taken	365
Inquest cases	216
Died under 24 hours of admission	101
Died under 48 hours of admission	20

RETURN SHOWING IMMEDIATE CAUSE OF DEATH.

Accidents	121
Ankylostomiasis	2
Beri-beri	31
Diphtheria	1
Dysentery—Amœbic	9
,, —Bacillary	7
Enteric Fever	3
Heat Stroke	2
Lightning	1
Lobar Pneumonia	16
Malaria	11
Meningitis	2
New Growth	13
Plague, bubonic	10
,, septicæmic	1
Septic conditions—varied	7
Schistosomiasis	1
Still births	1
Suppurative peritonitis	1
Tuberculosis	24
Small-pox	1
Senility	1
Post-Partum Hæmorrhage	1
Uræmia	1
Malnutrition	1
Disease of the Alimentary system	16
,, ,, Blood ,, ...	2
,, ,, Circulatory ,, ...	28
,, ,, Genito-urinary ,, ...	12
,, ,, Nervous ,, ...	7
,, ,, Respiratory ,, ...	12
Poisoning	11

RETURN SHOWING INCIDENCE OF DISEASE.

Beri-beri ...	28	Enteric Fever ...	3
Cerebro-spinal Meningitis ...	1	Leprosy	1
Dysentery, Amœbic acute ...	5	Malaria ...	12
Dysentery, Amœbic chronic ...	4	Malaria pigment only	42
Dysentery Bacillary acute ...	6	Neoplasm—Carcinoma	8
Dysentery, Bacillary chronic ...	3	Neoplasm—Sarcoma	4
		Plague, bubonic ...	10
		Plague septicæmic ...	1
		Syphilis ...	57
		Schistosomiasis ...	1
		Uræmia	5

A.—NERVOUS SYSTEM.

Acute Encephalitis ...		1	Transverse Myelitis		1
Cerebral Oedema ...		3	Meningitis ...		15
Cerebral Softening ...		2	cerebrospinal ...	1	
Cerebral Concussion		1	septic ...	2	
Gumma brain ...		1	syphilitic ...	2	
Gumma cord ...		1	tuberculous ...	10	

B.—CIRCULATORY SYSTEM.

Acute cardiac dilatation		3	Aortic Stenosis ...		1
Fatty degeneration, heart		1	Aortic Incompetence		10
Endocarditis—			Aortic Aneurysm ...		11
aortic ulcerative		2	Aneurysmal dilatation of aorta ...		9
aortic chronic ...		3	Aortitis—syphilitic ...		29
mitral chronic ...		2	Arteriosclerosis ...		6
Myocarditis chronic		2	Thrombosis ...		3
Pericarditis—			Coronary artery	1	
Pneumococcic ...		5	Common carotid	1	
acute ...	2		Pulmonary veins	1	
chronic ...	1		Secondary growth—heart		1
tuberculous ...	2		Myelogenous Leukæmia ...		1
Hæmopericardium ...		4			
Hydropericardium ...		1			

C.—RESPIRATORY SYSTEM.

Bronchitis—acute ...		2	Lower and middle, right	1	
Bronchitis—chronic		1	Upper and lower right	1	
Bronchopneumonia		15	Lower lobe right ...	1	
Empyema ...		4	Whole lung right ...	3	
Emphysema—advanced		2	Upper lobe, left ...	2	
Hæmothorax ...		10	Lower lobe, left ...	6	
Hypostatic congestion		1	Whole lung left ...	2	
Pulmonary infarct ...		1	Tuberculosis ...		53
,, gangrene ...		2	Acute—active ...	35	
,, collapse ...		5	Chronic—active	3	
Pleuritis—acute ...		20	Quiescent ...	15	
,, chronic ...		10	Tuberculosis—larynx		3
,, tuberculous		35	Tuberculosis—mediastinal gland ...		8
, with effusion ...		2	Gumma—rib ...		1
Lobar Pneumonia ...		15	Laryngitis—acute ...		1
Acute ...	12		Laryngitis—diphtheritic		1
Unresolved ...	3		Oedema Glottidis ...		3
Upper and middle, right	2				

D.—ALIMENTARY SYSTEM.

Abscess—retropharyngeal	1
Gastric ulcer, acute	1
Gastric ulcer, chronic	4
Duodenal ulcer	1
Intestinal obstruction—chronic	2
Tuberculosis—gut	8
Enteric Fever	4
Dysentery	20
Entero-colitis, acute	3
Follicular colitis	4
Cholecystitis	4
Biliary calculi	7
Obstructive jaundice	1
Pancreatitis—acute	1
Pancreatic cyst	1
Secondary growth—pancreas	1
Peritonitis—	
Acute—local	4
Acute generalized	16
Chronic—local	3
Chronic generalized	3

Hepatic Cirrhosis		13
Syphilitic	6	
Biliary	2	
Nodular	4	
Schistosomum	1	
Perihepatitis, chronic		3
Syphilitic	2	
Tuberculous	1	
Liver—gumma		1
,, amœbic abscess		2
,, cysts		1
,, cyanotic atrophy		3
,, fatty degeneration		1
,, tuberculosis		2
Perisplenitis—chronic syphilitic		2
Spleen—gumma		1
,, infarct		2
,, tuberculosis		1
Neoplasm—primary—		
Carcinoma—		
Nasopharynx		1
Oesophagus		1
Stomach		2
Liver		4

E.—GENITO-URINARY SYSTEM.

Nephritis—	
Acute parenchymatous	2
Chronic parenchymatons	7
Chronic interstitial	3
Pyelitis	2
Pyelonephritis	5
Hydronephrosis	2
Kidney—tuberculosis	2
Cystitis—acute	4
,, chronic	1

Dilatation of ureter	1
ureter	1
Uræmia	5
Hypertrophy of prostate	1
Abscess of prostate	1
Stricture of urethra	1
Salpingitis—chronic	4
Hæmatosalpinx	1
Neoplasm—primary— Sarcoma—testis	1
Carcinoma—kidney	1

F.—External Causes.

Asphyxia		23
Drowning	15	
Hanging	6	
Strangulation	1	
Foreign body	1	
Poisoning		13
Opium	7	
Chloroform	3	
Caustic soda	2	
Phosphorus	1	
Burns		2
Heat Stroke		2
Shock		2
Lightning	1	
Electrocution	1	
Scalding		2
Gun Shot Wounds—		
Abdomen	3	
Aorta	1	
Chest	3	
Femoral artery	1	
Heart	1	
Gut	1	
Lungs	3	
Liver	1	
Pulmonary artery	1	
Spinal cord	1	
Stab wounds—		
Abdomen	6	
Cut-throat	4	
Chest	4	
Gut	3	
Heart	3	
Kidney	2	
Lung	2	
Liver	4	
Pancreas	1	
Spleen	2	
Stomach	3	
Fracture—		
Clavicle	3	
Femur	6	
Humerus	1	
Lower jaw	1	
Patella	1	
Pelvis	6	
Radius	1	
Ribs	16	
Skull	32	
Spine	10	
Sternum	3	
Rupture—		
Aneurysm	2	
Bladder	1	
Duodenum	1	
Gut	1	
Liver	3	
Lungs	1	
Middle meningeal artery	2	
Spleen	3	
Stomach	2	
Laceration—		
Brain	18	
Diaphragm	1	
Gut	4	
Kidney	2	
Liver	6	
Lung	2	
Mesentery	2	
Muscle	1	
Spleen	2	
Stomach	1	
Hæmorrhage—		
Extradural	10	
Subdural	6	
Hæmopericardium	4	
Hæmothorax	10	
Peritoneal sac	18	
Postpartum	1	
Into gall bladder	1	
Oesophageal	1	
Internal jugular	1	

G.—Varied Conditions.

Gangrene of leg	1
Malposition of anus with stenosis	1
Premature birth	2
Rachitis	1
Septicæmia	2
Sapræmia	1
Cellulitis, acute	1
Small-pox	1
Vincent's Angina	1
Gonorrhœal Conjunctivitis	1
Tropical bubo	1
Status Lymphaticus	1
Neoplasm—primary—	
Sarcoma mediastinal glands	1
Retroperitoneal glands	1
Dermoid cyst	1

Helminthiasis.

Ascaris Lumbricoides	53
Ankylostomum duodenale	25
Trichuris Trichiura	13
Clonorchis Sinensis	16
Strongyloides Stercoralis	1
Schistosomum Japonicum	1

TAN TOCK SENG MORTUARY.

Total number of deaths	1,442
Number at which protocols were taken	620
Inquest cases	205
Died within 24 hours of admission	208
Died within 48 hours of admission	103

Return showing cause of Deaths (620).

Accidents ...	102
Poisoning ...	2
Ankylostomiasis ...	2
Beri-beri ...	28
Cholera ...	1
Dysentery—amœbic	21
,, bacillary ...	20
Diabetes mellitus ...	1
Enteric fever ...	20
Lobar Pneumonia ...	66
Leprosy ...	1
Malaria ...	30
Malnutrition ...	1
Meningitis ...	11
New Growth ...	32
Plague ...	5
Varied Septic conditions ...	10

Suppurative peritonitis ...	14
Schistosomiasis ...	3
Tuberculosis ...	51
Tetanus ...	1
Hæmato-lymphuria	1
Diseases of the Alimentary System ...	54
Diseases of the Blood System ...	7
Diseases of the Circulatory System ...	73
Diseases of the Genito-urinary System	27
Diseases of the Nervous System ...	11
Diseases of the Respiratory System ...	25

Returns Showing Incidence of Diseases.

Anthrax ...	1
Beri-beri ...	29
Cerebro-spinal Meningitis ...	2
Cholera ...	1
Dysentery—amœbic, acute ...	26
Dysentery—amœbic, chronic ...	16
Dysentery—bacillary, acute ...	22
Dysentery—bacillary, chronic ...	12
Enteric Fever ...	20
Pigmented patches	1

Malaria ...		40
Quartan ...	3	
Benign Tertian	1	
Subtertian	35	
S. T. and B. T. ...	1	
Malarial pigment only		31
Neoplasm—Carcinoma ...		30
Sarcoma		2
Adenoma		1
Leprosy ...		7
Plague—bubonic ...		1
septicæmic		4
Syphilis ...		141
Schistosomiasis ...		5
Tetanus ...		2
Uraemia ...		2

A.—Nervous System.

Acute Encephalitis ...		1
Cerebral softening ...		15
Meningitis ...		18
Cerebro-spinal ...	2	
Septic ...	7	
Syphilitic ...	5	
Tuberculous ...	4	

Gumma—brain ...	5
Gumma—cord ...	3
Facial paralysis ...	1
Transverse Myelitis	1
Hydrocephalus chronic ...	1

B.—CIRCULATORY SYSTEM.

Acute cardiac dilatation ...		1
Angina pectoris ...		1
Endocarditis ...		12
Aortic ulcerative	4	
Mitral and aortic ulcerative ...	2	
Aortic chronic ...	3	
Mitral chronic ...	2	
Mitral and aortic chronic ...	1	
Mitral stenosis ...		4
Aortic stenosis ...		1
Aortic incompetence		25
Aneurysm—aorta ...		12
Aneurysm—heart wall ...		1
Aneurysm—vertebral artery ...		1
Aneurysmal dilatation of aorta ...		9
Aortitis—syphilitic, advanced ...		97

Arteriosclerosis ...	38
Myocarditis, chronic	2
Heart—gumma ...	1
Pericarditis, acute ...	18
Pericarditis, chronic	12
Hydropericardium ...	4
Thrombosis—aortic	1
,, cerebral ...	1
,, superior mesenterical ...	1
,, inferior mesenterical	1
,, portal vein	1
,, splenic vein	2
Lymphatic Leukæmia	3
Mylogenous Leuk-	1
æmia ...	1
Pernicious Anæmia	2
Splenic Anæmia ...	3

C.—RESPIRATORY SYSTEM.

Broncho-pneumonia		37
Empyema ...		10
Pneumothorax ...		1
Pulmonary abscess ...		12
,, infarct ...		3
,, gangrene		9
,, collapse		11
Tuberculosis ...		119
Acute active ...	78	
Chronic active ...	6	
Quiescent ...	35	
Laryngitis—acute septic ...		1
Laryngitis—syphilitic		3
Laryngitis—tuberculous ...		9
Oedema glottidis ...		1
Foreign body—larynx		2
Hypostatic Pneumonia ...		2

Lobar Pneumonia ...		84
Acute ...	69	
Unresolved ...	15	
Upper lobe—right ...		6
Upper and middle right ...		5
Lower and middle right ...		9
Upper and lower right ...		3
Middle right ...		5
Lower right ...		11
Whole lung right ...		12
Upper lobe—left ...		4
Lower lobe—left ...		26
Whole lung ...		10
Carcinoma—lung—secondary ...		2

D.—ALIMENTARY SYSTEM.

Pharynx—ulceration		1
Retropharyngeal gangrene		1
Oesophagus—ulceration		2
Gastric ulcer		15
Acute	2	
Chronic	13	
Gastrectasis		1
Duodenal ulcer		4
Intestinal obstruction		5
Acute	3	
Chronic	2	
Tuberculosis—gut		23
Enteric fever		20
Dysentery		73
Follicular Colitis		1
Cholecystitis		12
Biliary calculi		18
Obstructive jaundice		6
Hepatic Cirrhosis		45
Syphilitic	26	
Biliary	5	
Malarial	1	
Nodular	9	
Schistosomum	3	
Bantis	1	

Spleen—abscess		2
infarct		11
tuberculosis		5
Perisplenitis, chronic		25
syphilitic		17
Peritonitis		44
Acute local	10	
Acute generalized	23	
Chronic local	4	
Chronic generalized	7	
Gangrene of gut		1
Neoplasm—primary—		
Carcinoma—nasopharynx	5	
Carcinoma—œsophagus	7	
Carcinoma—stomach	5	
Carcinoma—cæcum	1	
Carcinoma—liver	11	
Secondary growth—		
Intestinal wall	1	
Pancreas	2	
Liver	4	
Spleen	2	
Adenoma—liver	1	

E.—VARIED CONDITIONS.

Arthritis—knee	2
Charcot's—joint	1
Caries—nasal bones	1
Cellulitis, acute	6
Gangrene of leg	2
Ischiorectal abscess	2
Otitis media	1
Gumma shoulder	1
Erosion of ribs—aneurysm	1

Parotid gland—abscess	1
Pyaemia	2
Tropical bubo	1
Scoliosis	2
Spinal caries	5
Tuberculous glands of neck	1
Psoas abscess	2
Multiple Fibromata	1

Helminthiasis.

Ascaris Lumbricoides		87
Ankylostomum duodenale		55
Clonorchis Sinensis		13
Taenia Solium		2
Schistosomum Japonicum		3
Trichuris Trichiura		20
Protozoal infection		3
Trichomonas Hominis	1	
Giardia intestinalis	1	
Balantidium coli	1	

During the year 1,442 cases passed through the Mortuary of Tan Tock Seng Hospital—mainly adult males; Chinese 1,228, Indian 154, Malay 48, Arab 6, Eurasian 2, Japanese 2, Jew 1, Filipino 1.

I continue to append mortality figures which institute a comparison with previous returns.

Year.	*Total.*	*Malaria.*	*Dysentery.*	*Tuberculosis.*	*Beri-beri.*
1924	1,301	130	151	378	77
1925	1,442	184	188	312	84

In the case of Tuberculosis 312 were certified as having died of Pulmonary Tuberculosis, but it may be recorded that 485 or 33·5 per cent exhibited pulmonary lesions—active 409, quiescent 76. In prior reports I have drawn attention to the large number which show definite syphilitic infection. Some 408 or 32·4 per cent presented signs of acquired disease; in 142 there were distinct changes in the aortic wall; in 13 there was a saccular aneurysm; in a further 9 an advanced aneurysmal dilatation of the ascending portion of the arch, often involving the transverse portion, while in 24 the cusps were distorted, producing an incompetence of the valve.

There has been a distinct rise in the number of deaths from Malaria and Dysentery—

Dysentery	188
Amœbic	74
Bacillary	102
Mixed infection	12

whilst Lobar Pneumonia rose from 66 to 84.

Staff.

It is with the deepest regret that I record the loss by death of an able and willing assistant Mr. V. Gopalan, l.m.s. Mr. C. Subramanyam, l.m.s., who had previously held the acting appointment, was nominated for the vacant post and has carried out the duties in a satisfactory manner.

II. PENANG.

Report by J. A. Cowan, m.b., b.s., *Acting Government Pathologist, Penang.*

	1924.	*1925.*
Total number of specimens examined	37,580	49,794
Blood films.—Total number examined	10,013	11,209
Positive to Subtertian Malaria	943	1,427
Positive to Benign Tertian Malaria	572	346
Positive to Quartan Malaria	17	41
Stools.—Total number examined microscopically	14,852	13,633
Positive to Ankylostome Ova	1,741	2,898
Positive to Ascaris Ova	3,610	2,932
Positive to Entamœba Histolytica	138	108
Positive to Entamœba Coli	242	88
Positive to Clonorchis Sinensis	—	3
Total number examined culturally	39	368
Positive to B. dysenteriæ Flexner group	—	7
Positive to B. dysenteriæ Shiga	—	6
Positive to B. Typhosus	—	3
Positive to B. Morgan group	—	2
Positive to B. Fæcalis Alkaligenes	—	12
Positive to Salmonella group	—	10
Positive to B. Pyocyaneus	—	4
Urine.—Total number examined	7,877	10,641
Sputum.—Total number examined	1,773	1,591
Positive to B. Tuberculosis	394	410
Films for Gonococci.—Total number examined	424	448
Positive to Gonococcus	179	246
Films for B. Lepræ.—Total number examined	187	286
Positive	42	80
Films for Meningococci.—Total number examined	50	77
Positive	39	3
Films for B. Diphtheriæ—Total number examined	8	56
Positive	1	5
Autogenous Vaccines prepared	36	47

Agglutination Tests for Typhoid group.—		
Total	47	80
Positive to B. Typhosus	9	21
Positive to B. Paratyphosus A.	3	—
Positive to B. Paratyphosus B.	—	4
Examinations of clothing for Spermatozoa	—	2
Wassermann reaction.—Total	1,350	3,083
Positive	1,074	1,711
Sections for Tissues	44	46
Bacteriological Examinations of Drinking Water	27	79
Blood Counts	103	96
Cultures from various Body Fluids, etc.	539	5,580
Animal Inoculation tests for various Organisms	—	20
Dark Ground Examinations for Sp. Pallida	—	125
Positive	—	82
Films for B. Pestis.—Total number examined	—	6
Positive	—	—
Films for other Organisms.—Total number examined	—	1,969
Urine for Tubercle Bacillus.—Total number examined	—	9
Positive	—	—
Complement fixation tests for Human Blood Stains	—	4
Positive	—	3
Analysis of Gastric Contents after Test Meal	—	1
Blood Sugar Estimations	—	5
Post Mortem Examinations	242	333

During the year, the flotation method of examination of stools for Ankylostome Ova was taken into use. The results may be summarized as under:—

	Total examinations.	*Positive.*	*Percentage.*
Smear	9,653	1,310	13·6
Flotation method	3,980	1,588	39·9

Wassermann reactions of prisoners in Penang Gaol.

From March 24th, 1925, a Wassermann reaction was done on the blood of all persons confined in Penang Gaol.

A total of 771 specimens was examined. Of these, 24 proved to be anti-complementary: the results of the remaining 747 were as under:—

	Total		*Percentage.*	
	—		—	
Strong positive ...	214		28·6	
Positive ...	99	43·3	13·3	58·0
Weak positive ...	120		16·1	
Negative ...	314		42·0	

Post Mortem diagnoses—District and General Hospitals, 1925.

Tuberculosis—Pulmonary	67
Tuberculosis—General	1
Syphilis—Visceral	3
Dysentery—Amœbic	12
Dysentery—Bacillary	4
Malaria—Subtertian	17
Malaria—Cachexia	1
Septicæmia	4
Malnutrition	1
Senility	1
Nephritis—Subacute	6
Nephritis—Chronic	22
Pyelo. Nephritis—Acute	1
Pneumonia—lobar	27
Pneumonia—lobular	10
Pleurisy—acute	1
Empyema thoracis	1
Abscess of lung	1
Gangrene of lung	2
Sarcoma of lung	1
Myocarditis—chronic	5
Ruptured aneurysm—thoracic aorta	1
Valvular disease of heart	7
Arterial sclerosis	4
Hepatic cirrhosis	7
General peritonitis	7
Abscess of liver	2
Carcinoma of tongue	1
Meningitis—acute	2
Epilepsy	1
Asphyxia from drowning	1
Asphyxia from hanging	1
Cut throat	1
Fracture of skull	6
Fracture of vertebræ	1
Fracture of extremities	2
Stab wounds, penetrating thorax and abdomen ...	2
Electric shock	1
Poisoning by corrosives	1
Poisoning by alcohol	1
Poisoning by opium	7
Total	244

Post Mortem Diagnoses—Public Morgue.

Tuberculosis—Pulmonary	4
Tuberculosis—General	2
Leprosy	1
Dysentery—Amœbic	1
Malaria—Benign Tertian	2
Malnutrition	1
Nephritis—Sub-acute	1
Nephritis—Chronic	1
Pneumonia—Lobar	5
Pneumonia—Lobular	4
Pulmonary infarction	1
Gangrene of lungs	1
Acute congestion of lungs	1
Sarcoma of lung	1
Chronic myocarditis	5
Ruptured aneurysm of thoracic aorta	1
Valvular disease of heart	1
Chronic pericarditis	2
Atheroma of Coronary Arteries	1
Arteriosclerosis	1
Cirrhosis of liver and spleen	2
General peritonitis (from ruptured intestine)	2
General peritonitis (from liver abscess)	1
Carcinoma of stomach	1
Asphyxia from drowning	8
Asphyxia from strangulation	1
Asphyxia from hanging	5
Cut throat	1
Stab wounds penetrating thorax and abdomen	6
Fracture of skull	6
Rupture of spleen	3
Electric Shock	4
Multiple injuries	4
Decomposed, preventing satisfactory examination	8
Total	89

The Public Morgue in Brick Kiln Road has been in use throughout the year. It has now been repainted and fitted with flyproof windows, and is in a satisfactory condition.

Staff.—Dr. J. C. Tull, Government Pathologist, was in charge of the Pathological Department until his departure on leave on 17th March, 1924. Since 3rd April, 1924, Dr. J. A. Cowan has been Acting Government Pathologist.

III. MALACCA.

Report by S. N. Bardham, l.m.s. (Singapore), d.t.m. and h.,
Deputy Pathologist, Malacca.

1. *Examination of Stools for Ova:—*

Ankylostoma ova detected in	998
Roundworm ova detected in	229
Whipworm ova	311
Ankylostoma and whipworm ova	255
Ankylostoma and roundworm ova	225
Round and Whipworm Ova	286
Ankylostoma, Round and Whip	268
No Ova	1,168
Fasciolopsis buski	1

For Amœba:—

Amœba detected in	11
No Amœba	179

For Occult Blood:—

Blood detected	22
Blood not detected	16
Cultures of stools for Dysentery, Cholera and Enteric, etc.	27
Examination of smear for Cholera (negative result)	3
Examination of stools for Sprue	1
Examination of stools for T. B. (negative result)	2

2. *Examination of Blood:—*

For Malaria—

Subtertian	376
Benign Tertian	148
Quartan	64
Benign Tertian + Quartan	10
Benign Tertian + Quartan + Subtertian	10
Benign Tertian + Subtertian	27
Subtertian + Quartan	1
No Parasite	1,453

Widal for Enteric and Dysentery:—

Positive	6
Negative	52
Blood count, differential Lencocyte count and Hæmoglobin Index Estimation	82

Examination of Blood for Filaria etc.:—

Filaria detected	2
Filaria not detected	7
Estimation of Blood-sugar	31

3. *Examination of Urine:—*

General examination	2,473
Estimation of Sugar	16
Estimation of Urea	18
Examination for Chyle (positive)	1
Examination of Urine for Filaria (positive)	1
Cultures of Urine for B. Coli, etc.	10
Examination of Urine for T. B. (negative)	8
	8,798

4. *Examination of Sputum:—*

For Tuberculosis—	
Positive	162
Negative	468
For Pneumonocci—	
Positive	27
Negative	40
	697

5. *Examination of Pus for Gonococci:—*

Positive	76
Negative	137
	213

6. *Examination of Throat-swab for Diphtheria Bacilli:—*

Positive	23
Negative	49
	72

Examination of Smear for Lepra-Bacilli:—

Positive	19
Negative	43
	62

Examination of Cerebro-spinal fluid:—

For Meningococci (negative)	4
Examination of Smear for B. Pestis (negative)	2
Medico-legal Exhibits	14
Histological sections	43
Identification of Worms	6

Examination of Blood for Wassermann Reaction:—

Markedly positive	254
Positive	72
Negative	529
	855

Examination of Smear for Spirochæta:—

Positive	4
Negative	4
	8

Bacteriological Analysis of Water	30
Post-mortem Examinations	59
Preparation of Sera and Vaccine	11
Grand Total	10,882

7. Since 3rd June, 1925, all samples of stools have been examined for hookworm by flotation method. Eight hundred and forty of these samples were examined by ordinary smear. In light infection, the flotation method gives much better results. (In this laboratory, when both methods are tried first one drop if taken for ordinary smear preparation and then emulsion is prepared from the remainder). Again whether the flotation method is equally good for round and whip worm ova has yet to be determined. One drawback of the flotation method is that it does not show strongyloides and trichomonas; and these infections are fairly common here. This year trichomonas were found in 10 and strongyloides in 54 samples of stools. Twenty-seven specimens of urine also showed trichomonas.

This year one Fasciolopsis Buski was obtained from the stools of Chinese lady (a recent arrival from China to Malacca).

Also this year I came across seven enteric cases at Malacca. The cases were diagnosed clinically and bacteriologically and confirmed in post-mortem room.

There were several cases of diphitheria.

As before, in the training of dressers, the laboratory portion was entrusted to me. The Tuberculosis ward and also the Dysentery Ward of Durian Daun Hospital have been under my care through the year.

APPENDIX "D".

GOVERNMENT ANALYST'S BRANCH.

I.—SINGAPORE.

REPORT BY MR. J. C. COWAP, B.SC., F.I.C., *Government Analyst, S. S.*

The following tables shows the Revenue and Expenditure for the year 1925 and the Revenue collected during the preceding year:—

Revenue.	*1924.*	*1925.*	*Expenditure.*	*1925.*
	$ *c.*	$ *c.*		$ *c.*
Fees of Office.			Personal Emoluments	29,118 83
Petroleum Inspection ...	3,825 00	3,890 00	Stores from England ...	1,132 64
			Miscellaneous ...	759 42
Miscellaneous	9,403 50	8,891 50	Transport ...	365 19
Total ...	13,228 50	12,781 50		
Sale of Pyridine ...	2,547 10	2,747 50	Total ...	31,376 08

PETROLEUM.

Kerosene.—

Two hundred and eighty-seven Flash point tests were made on 164 consignments of kerosene imported into the Settlement and 15 tests on consignments for transhipment.

The total quantity of kerosene imported was:—

East Indian Oil	483,605 Tins.
American Oil	189,994 ,,

Ship Inspection.—

Fifty-seven vessels were tested for the presence of inflammable vapour before entering the harbour or docks.

Other Petroleum.—

Analyses of 26 samples of liquid fuel were made on behalf of the Admiralty, and analyses were made of one sample of crude oil, one sample of benzine and three samples of lubricating oil.

EXPLOSIVES.

Importation.—

Seven shipments of explosives were tested on importation to Singapore—All passed the prescribed tests.

Bombs.—

Five cases of criminal possession of bombs, etc. were dealt with. The lethal power of the locally manufactured bomb is in general small, but one improvised bomb examined this year was a very deadly weapon.

MONOPOLIES' DEPARTMENT.

A. *Ordinance No. 117* (Chandu Revenue).—

Reports were issued on exhibits in 165 prosecutions instituted under this Ordinance.

Assays were made on eighty samples of opium or chandu seized by the Preventive Service and fifty-one check samples of chandu from the Opium Factory were assayed.

Five thousand seven hundred and six packets of chandu dross were weighed and valued on purchase by the Monopolies Department from the keepers of smoking shops.

B. *Ordinance No. 118* (Liquors Revenue).—

Determinations of spirit strength were made on 4,326 samples of liquor for Singapore and on 238 samples from Malacca.

Forty-two samples of brandy and three of rum were analysed for purposes of classification. Of these twenty-four were passed as genuine.

Seventy-two samples of illicit liquor were examined for the Monopolies Department or the Police.

Two samples of bhang were received for identification.

C. *Other Liquors.*—

Forty-three samples of other liquors were examined.

These comprised samsoo, toddy, wine, beer, etc.

D. *Methylated Spirit.*—

Thirty-six consignments in all 748 drums of arrack, were methylated, the total volume of spirit being 112,000 gallons.

E. *Deleterious Drugs.*—

Thirty-nine samples of supposed Deleterious Drugs were received. Of these 25 were found to be Cocaine Hydrochloride or one of its analogues, eleven were Morphine Hydrochloride and three were found to contain no prohibited ingredient.

COUNTERFEIT COINS, ETC.

Six sets of exhibits in coining cases were received from the Police. They included 983 counterfeit "5ct" or "10ct" coins made from an alloy of tin and lead. Along with these there were three more or less complete plaster of paris coining outfits and one lot of apparatus in which the moulds were made from chalk or gum arabic.

In connection with the counterfeiting of coin six prisoners were examined for the presence on their clothes or persons of incriminating stains.

TOXICOLOGY.

Twenty-three specimens of viscera, stomach contents, etc. were received for analysis.

Of these 10 contained opium, 2 contained arsenic, 2 contained caustic alkalies, and one each, alcohol, yellow phosphorus and carbolic acid. In six cases no poison was discovered.

The stomach of a dog was found to contain strychnine.

In addition to the above, 5 samples submitted with reference to the "Poisons" Ordinance were proved to be in three cases native orpiment, and in one each strychnine nitrate and white arsenic.

Also, exhibits in 10 cases connected with poisoning contained lime, caustic soda, yellow phosphorus, chandu, powdered glass, nux vomica and metallic mercury.

CHEMICALS AND DRUGS.

Twenty-one samples of medicinal drugs were received for analysis, 16 of these were from the Medical Department and 5 from commercial firms. Of the total, thirteen were quinine sulphate, three were chloroform, one each carbon tetrachloride and tincture of iodine, and three were "medicines" whose nature was to be investigated.

METALS AND MINERALS.

Sixty-four samples of metals and minerals were received for assay. Of these forty-nine were tin-ores or buttons. The rest included wolframite, manganese ores, galena, clay, diamond send, pyrites, glass and coal.

WATER.

Analyses were made on thirty-two samples of drinking water and two samples of water to be used for industrial purposes.

MILK.

Fourteen samples of condensed milk, two of dried skim milk, one of reconstituted milk and two milk foods were examined.

URINES, ETC.

Twenty-one specimens of urine were received from the Hospital, mostly for the determination of sugar and urea. Ten specimens of test meals, also, were submitted by medical officers.

MISCELLANEOUS.

Reports were made on 103 miscellaneous samples. Included in these were fishery salts (20 samples), Illipe nuts (18) cube gambier, jelutong, sugar, rubber, tapioca, stick-lac, mortar, sand, coke breeze, washing soap, roofing tiles, paints, spent oxides, rations from the Prison, wheat flour, vitriol (in vitriol throwning-cases), etc.

PATENTS.

Reports were made on 25 applications for Patent Rights.

STAFF.

The Deputy Analyst, Penang, was on furlough from March to December and was relieved by Mr. A. C. BROOKS, 2nd Assistant Analyst.

Mr. R. E. WILLGRESS joined the staff of the Department on 19th December.

Mr. M. JAMIESON, Senior Assistant Analyst was on duty in Singapore throughout the year and I was in charge.

II.—PENANG.

REPORT BY MR. J. W. HADDON, B.SC., F.I.C., *Deputy Analyst, Penang.*

The following table shows the Revenue and Expenditure for the year 1925, the Revenue for the preceding year being given for the sake of comparison:—

Revenue.	*1924.*	*1925.*	*Expenditure.*	*1925.*
	$ c.	$ c.		$ c.
Petroleum Inspection Fees	2,430 00	2,780 00	Personal Emoluments	10,264 85
			Stores	384 75
Miscellaneous ...	1,784 00	2,768 00	Miscellaneous ...	192 53
Certificate for Export of Petroleum ...	159 00	167 50	Transport and Travelling Allowance ...	274 78
Total ...	4,373 00	5,715 50	Total ...	11,116 91

Seven hundred and sixty-five reports on general analytical work and fifty-six reports on the testing of Petroleum were issued during the year.

PETROLEUM.

Details of the consignments of kerosene and heavy petroleum imported are given below:—

A. KEROSENE.

	No. of Consignments.	*Tons.*	*Gallons.*
East Indian Bulk Oil ...	9	12,865,713	—
East Indian Oil in Tins ...	10	—	25,800
American Bulk Oil ...	1	—	800,000
American Oil in Tins ...	5	—	640,000
Total ...	25	12,865,713	1,465,800

B. HEAVY PETROLEUM.

	No. of Consignments.	*Tons.*	*Gallons.*
East Indian in Bulk ...	22	42,792,296	—
East Indian in Drums ...	9	—	96,525
Total ...	31	42,792,296	96,525

Flash point tests were made on samples taken from every consignment.

EXPLOSIVES.

Six consignments of Gelignite amounting altogether to 110,000 lbs. were imported during the year: samples from each consignment passed the tests prescribed by Ordinance No. 136 (Arms and Explosives).

ORDINANCE NO. 117 (CHANDU REVENUE).

One hundred and ninety-three exhibits in cases brought by the Monopolies Department and the Police under this Ordinance were examined and the contents certified and valued.

Twenty-five lots of chandu dross sent in bv the Kedah Government, and four hundred and thirty-two lots purchased by the Penang Monopolies Department from keepers of licensed smoking shops were examined and valued.

ORDINANCE NO. 118 (LIQUORS REVENUE).

The alcoholic strengths of 2,042 samples of liquors from the Penang Monopolies Department and 380 from the Kedah Customs were determined for the assessment of duty. Twenty-four samples of brandy were analysed for the purpose of classification under the liquors tariff.

Sixty-nine samples of toddy, two of whisky and one of wine were examined for the Monopolies Department. Seventy-three exhibits in cases brought by the Monopolies Department and the Police for breaches of the above Ordinance were examined and reported on. Fifteen of these consisted of bhang and most of the remainder of illicit samsoo.

Seven consignments of Javanese arrack, amounting in all to 5,550 gallons, were methylated for industrial purposes.

CHEMICALS AND DRUGS.

Twenty-four samples of Quinine were received from the Health authorities, of which number twelve were found to be heavily adulterated, borax being the usual adulterant.

A seizure sent in by the Monopolies Department consisted of 16 oz. of Morphine Hydrochloride.

Two samples of acetic acid and one each of sodium nitrate and kruschen salts were examined and reported on.

COUNTERFEIT COINS, ETC.

Only one set of counterfeiting exhibits was received from the Police. Included amongst the exhibits were 51 counterfeit Straits Settlements Silver coins, and the usual Plaster of Paris moulds, Britannia metal spoons, and Silver plating appliances.

WATER AND SEWAGE.

Eighteen samples of drinking water and two samples of water for industrial purposes were analysed. Ten samples of Sewage effluent received from the Municipal Engineer were examined and reported on.

MILK.

Twenty-four samples of fresh milk were analysed: two of these samples, purchased from licensed milk-sellers, were found to be adulterated by the addition of water.

Five samples of tinned milk and one of tinned cream were also analysed and reported on.

TOXICOLOGY.

Twenty-five specimens of Viscera, Stomach contents, Stomach washings, Urine, etc. were received for examination.

Morphine was found in 12 cases, Alcohol in 3 cases, Opium in 2 cases and Sulphuric Acid and Carbolic Acid in one case each.

In addition to the above the viscera of a cow was found to contain Oxalic Acid, and Morphine was detected in the carcases of two fowls.

Three exhibits brought by the Police in a case of attempted suicide proved to contain Caustic Soda.

MISCELLANEOUS.

Seventy-four articles were examined for evidence of sea water damage.

Forty-three samples of various substances were reported on.

They included Jelutong, Fertilizer, Coconut cake, Cement, Disinfectant, Tin-ore, etc.

Two hundred and twenty-five consignments of Rubber were surveyed prior to export and certificates issued.

STAFF.

I was on leave from April 11th to December 3rd during which period Mr. A. C. BROOKS, Assistant Analyst, Singapore, acted as Deputy Analyst.

For the remainder of the year I was in charge.

APPENDIX "E".

PRELIMINARY SURVEY OF HOOKWORM INFECTION AND RURAL SANITATION IN THE STRAITS SETTLEMENTS, 1925.

BY PAUL F. RUSSELL, M.D.

As the result of negotiations between the Government of the Straits Settlements and the International Health Board of the Rockefeller Foundation, the latter organization agreed to carry out a preliminary survey of hookworm infection in the Straits Settlements, upon the results of which plans for co-operative health work might be based. For this purpose, it detailed from its regular staff, Dr. MILFORD E. BARNES and Dr. PAUL F. RUSSELL, who arrived in Singapore, February 24th, 1925. In co-operation with the Medical Department, these officers conducted surveys in the following settlements or provinces:—Singapore, Penang, Province Wellesley, the Dindings, Malacca and Labuan. These surveys included a study of hookworm infection, of general sanitary conditions, and of organized health work, and were completed on September 21st, 1925.

I. METHOD.

General infection rates during this survey were determined by the examination of specimens of stool submitted from various groups of the population. The technique employed in hunting for hookworm ova is known as Willis-Molley flotation method and consists in mixing a small portion of stool with saturated salt (NaCl) solution, and placing a 2 x 3 inch glass slide upon the container in such a way that its under surface touches the surface of the mixture. The hookworm ova if present are floated to the surface by the saturated solution and tend to adhere to the glass slide. The slide is then everted and examined under a low power compound microscope.

This flotation method gives a higher percentage rate than the smear method which heretofore has been used in the laboratories of the Straits Settlements. At Tan Tock Seng Hospital in Singapore for example, 446 specimens examined by the smear method gave an infection rate of 20·1 per cent, whereas the next 1,510 specimens which were examined by the flotation technique gave a rate of 39·1 per cent.

Attempts to measure the intensity of hookworm infection were made in four ways, *viz.* by counts of the ova on the flotation slides; by ova counts of the measured mixture (stool counts); by the worm counts; and by the hæmoglobin readings.

The prevalence of soil infestation with hookworm larvæ was determined by numerous samples examined by means of a modified Baermann apparatus.

II. General Infection Rates.

During the survey specimens of 4,620 individuals resident in Straits Settlements were examined and hookworm ova were found in 3,385 specimens. This gives a general infection rate of 73·3 per cent. An additional group of 708 coolies newly arrived from India had an infection rate of 44·3 per cent. The details are given in Tables 1, 2, 3 and 4.

Table No. 1.—*Hookworm Infection Rates in Straits Settlements, 1925.*

Settlement or Province.	*Total No. examined.*	*No. found infected.*	*Percentage found infected.*
Singapore Rural ...	123	74	59·2
Penang ...	708	498	70·3
Malacca ...	2,334	1,701	72·9
Province Wellesley	728	583	80·1
Dindings ...	342	270	78·9
Labuan ...	383	259	67·6
Total ...	4,620	3,385	73·3
Coolies newly arrived at Penang Quarantine Station from India ...	708	314	44·3

Table No. 2.—*Hookworm Infection Classified as to Race.*

(Based upon an analysis of 4,305 examinations).

Race.	*Total examined.*	*No. found infected.*	*Percentage found infected.*
Europeans ...	17	6	35·3
Chinese ...	597	388	64·9
Javanese ...	52	37	71·2
Eurasian ...	21	16	76·2
Indian ...	1,966	1,532	77·9
Malay ...	1,652	1,304	78·9
	4,305	3,283	

INFECTION CLASSIFIED AS TO SEX.

The infection rates among males and females were practically the same:—

TABLE NO. 3.—*Infection Classified as to Sex.*

(Based upon 5,095 examinations).

Sex.		*No. examined.*	*No. found infected.*	*Percentage found infected.*
Male	...	3,819	2,696	70·6
Females	...	1,276	919	71·2
Total	...	5,095	3,615	

TABLE NO. 4.—*Infection Classified as to Age.*

(Based upon analysis of 5,095 examinations).

Age Group.		*No. examined.*	*No. found. infected.*	*Percentage found infected.*
0 to 5 years	...	248	148	59·7
6 to 18 ,,	...	1,915	1,443	75·4
19 to 40 ,,	...	2,567	1,755	68·8
41 to 60 ,,	...	248	209	73·6
Over 60 ,,	...	45	38	84·4

III. INTENSITY.

Of the total number of cases classified according to the numbers of ova seen by the Willis method (4,968) 429 or 8·6 per cent were estimated to harbour 100 or more hookworms.

Another method of illustrating the severity of hookworm infection in a population is to show the percentage of cases expelling worms in excess of certain arbitrary standards. For this purpose, data collected in past years by Dr. LINDOW and Dr. TULL has been classified into two groups, namely, those expelling 25 or more hookworms, and those expelling 50 or more hookworms. In the following table, only the cases receiving two or more courses of treatment have been included.

TABLE NO. 5.—*Percentages of Cases expelling Hookworms in excess of certain Arbitrary Standards.*

Series.		*No. of Cases.*	*Percentage of cases expelling 25 or more hookworms.*	*Percentage of cases expelling 50 or more hookworms.*
Dr. Lindow's Series	...	166	71·0	45·7
Dr. Tull's Series	...	68	61·7	31·5

Whichever of the above mentioned standards is considered as a basis for sub-clinical infection, it is evident that an appreciable percentage of the population requires treatment.

An analysis of the hæmoglobin reading of 1,281 cases of all races submitted to Tan Tock Seng Hospital was classified with reference to the numbers of hookworms expelled after treatment and the average hæmoglobin computed in the groups 1 - 49 worms, 50 - 99 worms and 100 or over hookworms respectively. The downward trend of the hæmoglobin with the increasing number of hookworms was readily demonstrated.

IV. OTHER INTESTINAL HELMINTHS.

Infection with *Ascaris lumbricoides* and *Trichiuris trichiuria* were common among the individuals examined.

TABLE NO. 6.—*Infection with other Intestinal Helminths.*

Settlement or Province.	*No. examined.*	*No. found infected with Ascaris.*	*Per cent infected with Ascaris.*	*No. infected with Trichiuris.*	*Per cent infected with Trichiuris.*
—	—	—	—	—	—
Malacca ...	2,226	746	33·5	607	27·2
Penang, Province Wellesley, Dindings ...	1,778	968	54·4	544	30·6
Labuan ...	383	260	70·5	84	21·9

TABLE NO. 7.—*Multiple Infections.*

(Based on analysis of 5,095 examinations).

No. of species of Helminths harboured.	*No. of cases.*	*Percentage of total cases.*
—	—	—
None	865	16·9
One	2,248	44·1
Two	1,323	25·9
Three	650	12·7
Four	9	0·17

V. QUARANTINE STATION, PULAU JEREJAK—PENANG.

Examinations of newly arrived Tamil coolies were made at the Pulau Jerejak station in Penang. Some had been given treatment for hookworm infection before leaving India, some had had two treatments one in India and one at Pulau Jerejak, some were untreated. The results of these examinations may be grouped as follows:—

TABLE NO. 8.—*Hookworm Infection Rates among newly arrived Tamil coolies at the Penang Quarantine Station.*

Group.	*No. examined.*	*Per cent infected with hookworm.*
—	—	—
Untreated coolies ...	187	59·4
One treatment group ...	379	47·5
Two treatment group ...	142	23·2

APPENDIX "F".

TAN TOCK SENG HOSPITAL, SINGAPORE.

REPORT BY E. D. LINDOW, M.R.C.S., L.R.C.P.

1. *Work done.*—

Remained on 31st December, 1924	650
Admitted during 1925	12,383
	13,033
Discharged	10,861
Died	1,319
Remained on 31st December, 1925	853
	13,033

2. The average daily sick was 751·05 compared with 669·73 in 1924.

3. The percentage of deaths to total treated was 10·12 per cent compared with 12·93 per cent in 1924.

4. The total number of deaths was 1,319. Of these 271 died within 24 hours of admission. Deducting these the death-rate was 8·04 per cent.

5. *Malaria.*—The total number of cases treated was 2,467 compared with 1,526 the previous year. Of these 204 died giving a death-rate of 8·26 per cent compared with 8·51 per cent in 1924.

Seventy-eight cases died within 24 hours of admission, deducting these the total malarial death-rate is reduced to 5·1 per cent.

Types of Malaria.	*Cases treated.*	*Deaths.*
Benign Tertian	287	8
Sub-tertian	1,160	162
Quartan	84	8
Mixed infections	154	9
Chronic	534	17
Unclassified (clinically malaria) ...	248	—
	2,467	204

Blood examination is adopted in all cases of fever and the total number of specimens examined gave the following results:—

Sub-tertian	1,342
Benign tertian	356
Quartan	108
Mixed	245
Negative	3,720
	5,771

Seasonal Incidence.—The admissions increased monthly throughout the year, the approximate numbers being:—

January and February 95; March 100; April and May 160; June and July 210; August and September 250; October 338; November 354; December, 368.

This record shows a marked contrast to previous years, when the numbers of Malarial cases usually fell during the last three months.

This fact may be explained partly by the long continued drought, and partly by increased numbers from neighbouring states seeking admission owing to better facilities for transport.

These cases showed a more virulent infection than is generally seen in Singapore, this is especially the rule in those cases coming in from the Dutch Islands, many of which were fatal.

7. *Dysentery.*—The number of cases treated was 485, of which 172 died giving a death-rate of 35·46 per cent compared with 33·78 per cent in 1924.

Types of Dysentery.	*Cases treated.*	*Deaths.*
Amœbic	133	75
Bacillary	254	96
Chronic	26	1
Mixed	3	—
Unclassified	69	—
	485	172

8. *Beri-beri.*—The numbers increased from 416 the previous year to 623, the percentage death-rate however dropped to 12·03 per cent, which is the lowest recorded since 1920.

Seventy-five deaths were recorded, of which 33 died within 24 hours of admission, arriving in a too advanced condition for treatment to be of any avail.

Comparative figures:—

	1919.	*1920.*	*1921.*	*1922.*	*1923.*	*1924.*	*1925.*
Cases	700	136	297	730	483	416	623
Deaths	78	14	75	107	64	77	75
Mortality	11·14%	10%	25·25%	14·57%	13·25%	18·50%	12·03%

9. *Enteric Fever.*—Forty-six cases were treated with 24 deaths, a percentage rate of 52·17 per cent compared with 45·00 per cent the year previous.

10. *Pneumonia.*—There were 221 admissions with 80 deaths of the lobar variety, and 35 admissions with 28 deaths of the broncho-type. Tamils appear to be more susceptible to this disease than other races, and contributed 40 per cent of total deaths from this infection whereas their total proportion of admissions is less than 10 per cent.

Tincture of iodine intravenously was the general routine treatment and gave good results, but the use of Pneumonia Phylacogen although only tried in a limited number of cases, seems even more promising. One cc. is given subcutaneously the first day as a sensitizing dose, followed by 4 minims, 6, 8, 10 minims on successive days, given intravenously.

11. *Venereal Disease.*—One thousand seven hundred and thirty-six cases were treated compared with 1,359 in 1924, with 46 deaths as against 77 the previous year.

	Cases.	*Deaths.*
Syphilis Congenital	2	—
Syphilis Primary	272	—
Syphilis Secondary	795	2
Syphilis Tertiary	84	44
Chancroid	345	—
Gonorrhœa-urethritis	191	—
Gonorrhœa-other manifestations ...	47	—
	1,736	46

Treatment of Syphilis.—Modern methods were adopted in all cases, but the great drawback to efficient treatment is that patients very seldom remain to complete their full course. Mercury was given to all patients as a routine, either by mouth or intramuscular injection, while inunction parades are held daily.

Seven hundred and seventy-three intramuscular injections of Calomel Cream were administered, but patients complained of a certain amount of pain, consequently a trial was given to Bicreol (Burroughs, Wellcome), 125 injections being made. This preparation contains 0·15 gramme metallic bismuth per c.c., and has the advantage of being comparatively painless and also free from the oral symptoms usually manifested with the administration of bismuth salts. Arsenical preparations were used in conjunction with mercury and bismuth, the following numbers of large tubes being used:—

N. A. B.	457
Neosalvarsen	1,092
Sulpharsenol	209

Trial was also given to Neo-trepol, Neo-treparsenum and Novarsan. The last named has given promising results and is being given an extended use.

12. *Helminthiasis.*—As a routine, all stools were examined microscopically on admission, with the following results.

Ankylostoma ova	2,422
Ankylostoma and round worm ova	366
Ankylostoma and whip worm ova	637
Ankylostoma plus round worm and whip worm ova	253
Round worm only	796
Round worm and whip worm ova	343
Whip worm ova	1,368
Amœbae	51
Clonorchis Sinensis ova	3
Negative	5,517
	11,756

Percentage of Infection with:—

Ankylostomes	31·28%
Round worms	14·95%
Whip worms	22·12%

With regard to the Ankylostome percentage, during the first four months of the year the plain smear method was utilised and gave a percentage of 13·2%. The salt flotation method was used during the last eight months, giving a percentage of 43·4% which is more like the true rate of infection.

Stoll Egg Count.—The object of this calculation is to estimate the approximate number of worms infecting a patient, by counting the number of ova in a given quantity of stool. Sixty-three counts were done, and in 41 cases definite results were obtained. The evidence collected both clinically and post mortem was so conflicting that one is forced to the conclusion that this method is unreliable in calculating the actual amount of infection.

The total number of stools examined including repeated examinations was 12,440, with results appended:—

Ankylostoma ova	2,579
Round worm	823
Whip worm	1,427
Amœbae	53
Clonorchis Sinensis	3
Ankylostoma and round worm	375
Ankylostoma and whip worm	685
Ankylostoma round and whip worm ova ...	264
Round and whip worm	353
Negative	5,878
Total ...	12,440

13. *Ankylostomiasis.*—There were 524 cases where this infection was the principal disease, with 9 deaths, a rate of 1·70% compared with 6·88% in 1924.

This great improvement must be regarded with satisfaction; the above figures are confirmed clinically by the decrease in the number of worms passed and also by examination of the gut post mortem.

Treatment.—Carbon tetrachloride was generally used in preference to oil of Chenopodium, but many cases were tried with a combination of both drugs.

The following figures show the results of treatment:—

	Cases treated.	*Average number of worms.*	*Cured.*
One dose Carbon Tetra chloride ...	849	13·9	74·3%
Two doses Carbon Tetra chloride ...	72	26·8	81·6%
Three doses Carbon Tetra chloride ...	19	52·0	86·8%
Four doses Carbon Tetra chloride ...	1	45·0	—
One dose Ol. Chenopodium ...	22	11.7	70·8%
Mixed Ol. Ch. One and Carbon Tet. One	48	24·3	85·4%
Ol. Ch. One and Carbon Tet. Two ...	5	37·2	80·0%
Ol. Ch. Two and Carbon Tet. Two ...	26	16·7	76·1%

14. *Tuberculosis.*—Eight hundred and thirty-one patients were treated, 747 being Pulmonary. Three hundred and thirty-five died giving a death-rate of 40·31% compared with 53·37% the previous year.

15. *Ulcers.*—One thousand and twenty-eight cases came for treatment. No improvement is noted in the condition in which these patients report for admission. They invariably delay until the infected area is so great that treatment is a very tedious affair.

16. *Plague.*—Five cases were admitted, 2 Bubonic, 3 Septicæmia, all of which died.

17. *Opium Habit.*—The total admissions were 1,318, with the following results:—

Completed full course, apparently cured ...	745
Absconded	530
Discharged for breaking rules	14
Unfit for treatment	5
Remaining 31st December, 1925	24
	1,318

18. *Medico Legal.*—Ninety-eight bodies were sent by the coroner for post mortem examinations. One thousand six hundred and thirty-four persons were brought by the Police for treatment. One hundred and ninety-five cases were sent for observation for insanity, 111 of which were certified.

19. *General.*—The large increase in the number of patients during the latter portion of the year, caused a great deal of overcrowding in the wards, and extra accommodation is being provided.

The water-carriage sewage system was completed in April and has greatly improved the sanitary conditions of the hospital.

20. *Dressers.*—Owing to the calls made by other hospitals, the staff was more junior than is customary. There were a number of applicants for the vacant posts, and with the improved standard of elementary education and the larger field for selection, this service should become more efficient.

Regular instruction is given in all branches of the work, and the examinations held show the following results.

Passed for Grade II	3
,, ,, ,, III	13
,, ,, Special Laboratory Course	13
,, ,, Post Mortem Course	9

21. Dr. E. D. LINDOW was in charge throughout the year. Mr. K. BLACK, F.R.C.S. (England) was in surgical charge until 18th April, 1925, when he was relieved by Mr. A. D. WRIGHT, M.S., F.R.C.S.

APPENDIX "G".

TREATMENT OF SCABIES BY THE DANISH METHOD.

A return of uncomplicated cases of Scabies treated by the Danish Method in certain hospitals and in dispensaries in the Straits Settlements, during 1925, is attached.

Conclusions are:—

(1) That most sufferers are cured by a single application.

(2) That the method does not require so much attention to detail as the Sulphur Ointment treatment.

(3) That these considerations render it specially suitable to outdoor cases who will probably only make one attendance at a dispensary.

(4) That in cases treated as in-patients the time spent in hospital is reduced to half (average about 5 days, instead of over ten with Sulphur Ointment treatment).

SCABIES IN-PATIENTS TREATED BY THE DANISH METHOD.

	Total number treated.	Cure 1st application	Cure 2nd application	Cured number of applications not stated.	Left before cured.
General Hospital, Singapore ...	6	...	5	...	1
Tan Tock Seng's Hospital, Singapore	54	32	21	1	...
Hospitals in Malacca ...	72	56	16	...	...
General Hospital, Penang ...	36	25	6	...	5
District Hospital, Penang ...	15	...	...	15	...
Hospitals in Province Wellesley	29	...	...	29	...
Total ...	212	113	48	45	6

2. Treated in Out-door Dispensaries including travelling dispensaries—1952.

Very few of these cases returned a second time: it may be assumed that the majority were cured by a single application.

APPENDIX "H".

REPORT ON THE TREATMENT OF OPIUM HABIT.

I.—SINGAPORE.

REPORT ON PATIENTS RECEIVING TREATMENT FOR OPIUM HABIT FROM 5TH MARCH, 1925 TO 31ST DECEMBER, 1925, BY DR. E. D. LINDOW, M.R.C.S., L.R.C.P.

GENERAL.—

Treatment was commenced on 5th March, 8 beds being set aside for these patients, but owing to the large number of applicants the number of beds was increased to 40 (one ward) before the end of March, this number being available throughout the year.

The total number of admissions was 1,318, with the following results:—

Completed full course, apparently cured	745
Absconded	530
Discharged for breaking rules under treatment ...	14
Unfit for treatment	5
Remaining on 31st December, 1925	24
	1,318

On admission patients are instructed that they come solely for voluntary treatment and must obey the few simple rules laid down, *viz.*:—

1. No visitors allowed to the ward.
2. Patients to confine themselves to the ward and the ground in the immediate vicinity thereof.
3. They are not allowed to converse with the patients of other wards unless they submit to being searched.

Patients are also warned that treatment takes from 14-21 days, and that during the first 72 hours they are liable to great discomfort and bowel troubles. Also that symptoms may become very alarming to the patient but actually no danger is incurred, and if they can resist this period the remainder of the treatment is not unpleasant.

They are distinctly warned that contravention of the rules will result in their immediate discharge, and they are asked to help the staff by reporting persons who try to sell opium in the ward.

A waiting list is kept, and the numbers still remaining on it are 985, but towards the end of the year the beds were not always filled. This may be attributed either to the fact that they get tired of waiting, or increased local prosperity permits them to live and also indulge in the habit.

REASONS FOR ADMISSION.—

This, in practically every instance, is a financial one and not to rid themselves of the supposed ill-effects of the drug. The average amount taken daily is 6 hoons, costing 80 cents, but this amount again depends on financial circumstances. As regards the starting of smoking, the reason appears to be equally divided between pleasure and sickness.

TREATMENT.—

A. General.—Every attempt is made to make the ward as attractive as possible—clean clothing, mattresses and bed sheets being regularly supplied. Extra food is provided in order to act as a stimulus to the patients to carry out the full course and also because that after the initial difficulty has passed, they show increased appetites.

Careful physical examination must be done before subjecting the patients to treatment, especially so, as regards suspicion of Pulmonary Tuberculosis. Two cases impressed this fact upon us--they came up for treatment and their general condition created suspicion. In both instances careful clinical and microscopical examinations were made, after which it was decided to start treatment. They both completed the course, but within two months both came back with signs of active tuberculosis.

B. Medicinal.—1. All opium is stopped at once, and hypodermic injections of Atropine Sulphate given. The initial dose is 1/75 grain, being increased daily until 1/25 grain is reached on 4th day, and continued for 10 days.

2. To promote sleep, Ammonium Bromide Grs. xxx. is given nightly. In cases where that drug fails Chloretone Grs. 10 - 15 has been utilized and with very good results. It seldom causes vomiting and is much preferred by the patients, but being expensive is reserved for bad cases only. If these drugs fail hypodermic injections of Morphia have to be given in small doses, but the result obtained is often psychological as equally good results may sometimes be obtained by an injection of distilled water.

3. In order to counteract depression, simple tonics are given by the mouth, and ordinary symptomic treatment suffices for other conditions.

RESULT OF TREATMENT.—

1. For the first 72 hours patients do suffer from great discomfort. The mental effect is very pronounced and in bad cases when the craving is at its height they literally roll about and groan in agony. Vomiting, diarrhœa and abdominal pain are common symptoms, and great thirst is experienced as is only to be expected. During this period insomnia is the general complaint and loss of weight is noticeable. It is during this period that the majority of the patients abscond, but if they tide it over they usually complete the treatment.

2. After this initial period the most striking complication is that of nocturnal emissions. Patients getting on an average of 2 - 4 per night, and being unaccustomed to them, they are rather distressing. Bromides do not seem to influence them at all, but chlorotone is much more effective. In my opinion, this raises a very important question as we are affected locally. Of the patients who have had venereal disease, 90 per cent contracted it before taking to opium smoking. The inference to be drawn from this is, that if the controlling influence over their emotions is cut off, these emotions must find another outlet, and in view of this particular symptom the outlet is either sexual or alcoholic.

3. Next in importance are various types of pain, the most prominent being the typical aches in bones and joints of syphilis. When under the influence of opium these pains are absent, but recur when the drug is stopped. These are controlled by bromide to a great extent, but how long after leaving hospital they will maintain the cure is a very moot point.

Abdominal pains and diarrhœa are frequently met with, and the reason is obvious. As regards the latter condition patients are usually constipated on admission, suffer from diarrhœa when the opium is stopped, but their bowels act normally at the time of their discharge and continue to do so.

4. For the first few days patients lose weight, but then their appetites increase enormously and they all leave hospital having gained on an average 5 - 6 pounds.

5. It has been maintained that the Chinese as a race, show marked idiosyncrasy for belladonna and its derivatives, but no case here has produced any evidence to that effect.

6. Opium is supposed to possess prophylactic properties against diabetes. Every urine has been tested and no cases of glycosuria have been traced, but as this hospital only averages about 6 cases of diabetes per annum, the evidence is not conclusive.

7. An interesting point was observed among opium smokers, in reference to their hæmoglobin percentages. In a series of 500 other cases (none of whom had ankylostoma ova in their stools) the average was 79·1 per cent, whereas the opium smokers showed 90 per cent. This may possibly be explained by the fact that 90 per cent of opium patients are rickshaw pullers and better fed than the average patient.

8. Dross eaters are much more intractable to treatment than smokers, principally owing to bowel troubles.

PERMANENCY OF CURE.—

It is recognized that the treatment of drug habits is one of the most difficult that confronts the medical profession. The course of treatment given eradicates the drug from the system and abolishes the desire for the drug, but the subsequent result depends entirely upon the patient himself. In the class of patient with which we have to deal here, it is very difficult to believe that they possess the necessary will power to resist the craving when it recurs, but the position appears much more hopeful with the better educated classes.

It is difficult to follow up cases after they are discharged, consequently the scope is very limited for forming a definite opinion.

Eighteen hospital attendants completed the full course, 12 of whom are still attached, 3 certainly have relapsed, but this number is probably an underestimate as some attendants are under the erroneous impression that return to the habit means dismissal. One rickshaw puller, whose stand is near the hospital admits to taking alcohol, only since having stopped opium.

The question of alcohol is, in my opinion, a very important one—the number of cases of drunkenness brought to hospital is on the increase, admittedly greatest among Tamils. On the other hand when cases of acute alcoholism do occur in the staff it usually takes 3 days before they are fit for work, and in one patient admitted here it was 6 days before his condition became normal. I have never seen an attendant unfit for work as a result of opium.

As regards capacity for work, no difference could be detected between the smoker and non-smoker, but this again probably a question of temperament.

CONCLUSIONS.—

1. The treatment given is an efficient temporary cure, but subsequent and permanent cure depends on the patient himself.
2. To ensure a permanent cure, an organization should be in operation, so that on the return of the desire for the drug, treatment in institutions can be obtained at once.
3. Indulgence in the habit reduces sexual desire and *ipso facto* reduces venereal disease.
4. In Asiatic races, addicted to opium, alcoholism is a more serious problem than morphinism.

II.—PENANG.

REPORT ON ANTI-OPIUM TREATMENT BY W. A. TAYLOR, M.B., Ch.B.

A ward for the cure of the opium habit was opened at the General Hospital on 7th March, 1925. The ward accommodates 16 patients. On 27th July, 1925, another ward at the District Hospital was opened for the same purpose. This ward has accommodation for 30 patients.

2. Patients desiring admission apply to the Protector of Chinese, Penang, who is kept informed as to vacancies. The Protector of Chinese gives each patient an admission note.

3. Patients are told on admission that the cure requires 3 weeks and that they are not to keep any money on them and that they are not to see visitors during that time. The Protector of Chinese endeavours to keep in touch with ex-patients.

4. Few of those admitted show marked signs of opium smoking, so it is difficult to say whether a cure has been obtained or not. Those who abscond are probably genuine opium smokers. I am inclined to doubt if many of the others use opium at all.

Total admissions for 1925	572
Total who completed the course	410
Total who absconded or did not complete the course ...	162

Two cases completed two courses, the interval being about 1 month.

III.—MALACCA.

REPORT ON ANTI-OPIUM WARDS BY H. G. HOLDBROOK, M.B., Ch.B.

A ward of twenty beds for the treatment of persons desirous of being cured of the Opium habit, was opened in Durian Daun Hospital on February 1st, 1925. Later the number of beds was increased to 30.

Up to December 31st, 1925, there were 582 admissions to this ward. Of these 411 completed the full course of treatment, 59 absconded and 112 were discharged at their request before the completion of the full course.

Five patients were admitted twice and one patient was admitted three times.

It has not been possible to follow up the records of those who went through the whole course and so it is impossible to say whether the so called cures were genuine and permanent.

There is reason to suspect that a number of patients seek admission to the ward because of the attractions of comfortable quarters and good food.

APPENDIX "I".

OUT-PATIENTS TREATED DURING THE YEAR 1925, AT THE WOMEN AND CHILDREN'S DISPENSARY, KANDANG KERBAU, SINGAPORE.

REPORTED BY MRS.. C. H. DUKE, M.B., D.P.H.

New patients.	*Repetitions.*	*Total.*
9,701	17,203	26,904

The corresponding figures for 1924 were:—

New patients.	*Repetitions.*	*Total.*
7,572	16,543	24,115

Of the 9,701 new cases in 1925, 4,886 were children:—

Nationalities.

Chinese	5,940
Eurasians	1,185
Tamils	1,315
Malays	845
Jews	184
Japanese	98
Bengalis	51
Sikhs	34
Others	49
	9,701

There were 773 cases of *venereal disease* giving a percentage of 8·00:—

Syphilis	287
Gonorrhœa	369
Syphilis and Gonorrhœa	52
Congenital Syphilis	35
Gonorrhœa Ophthalmia	29
	773

The number of *fever* cases were:—

Malaria	132	B. T.	106
		S. T.	22
		Quartan	2
		Mixed Infections	2
Unspecified	474		
Total	606		

Phthisis cases numbered 73.

Ankylostomiasis cases numbered 14.

Microscopical examinations numbered 1,845.

The number of *injections* given for Venereal Disease were:—

N. A. B.	187
Stabilarsan	447
Sulfarsenol	132
Gonococcal Vaccines	42
Total	808

APPENDIX "J".

REPORT OF THE RADIOLOGIST, SINGAPORE.

There is an increase in the work done: 3,552 radiographs were taken: the numbers for the two previous years were 3,271 and 2,907.

One hundred and sixteen Barium meal examinations were made.

Thirty-six patients were treated with therapeutic exposures to X—rays.

Dr. J. S. WEBSTER was in charge until 21st September, 1925, the late Dr. D. R. HENESSEY until 12th November, 1925, and Dr. R. B. MACGREGOR from that date until the end of the year.

APPENDIX "K".

REPORT ON SCHOOLS.

EXTRACT FROM THE REPORT OF MRS. C. H. DUKE, M.B., D.P.H., LADY MEDICAL OFFICER, GIRLS' SCHOOLS, SINGAPORE.

Six Schools were examined during the year:—

1. Fairfield Girls' School.
2. The French Convent School.
3. The Methodist Girls' School.
4. The Raffles Girls' School.
5. The Singapore Chinese Girls' School.
6. The St. Anthony's Convent School.

Visits.—The children of each school were examined twice during the year, and two visits of inspection were also made to the school premises.

Vaccination.—About 24 per cent of the school children required re-vaccination.

Development since 1924 inspection:—

1. General Nutrition.—This as a whole was much better than for the year 1924.
2. Clothing.—Last year's report showed children with *insufficient* clothing to be 17 per cent, found chiefly in the lower forms. An improvement was noted in 1925, this number being reduced to 14½ per cent.
3. Pediculi Capitis and Nits.—This condition showed great improvement in all Schools, except in the St. Anthony's Convent, which showed no improvement whatever, the percentage there being 21.
4. Medical Attention.—This is unsatisfactory as there is no method by which defective conditions can be compulsorily remedied either by free treatment or by the parents' own medical attendants.

   The Skin Conditions showed no improvement, dental caries slight improvement, and defective vision a big improvement.
5. Skin Diseases.—These showed a slight increase in spite of the fact that in most of the cases the conditions could be easily eradicated.
6. School Hours.—These are still too long at the two Convent Schools. Many complaints have been received, as the children in many cases have home work to do in addition to being at school from 9 A.M. to 4 P.M. The usual hours of 8 A.M. to 1 P.M. are again advocated.
7. Sanitation.—Latrines and washing accommodation are still insufficient in some schools.
8. Food.—This question is again most serious at the two Convent Schools. At the other schools the children go home for 1 o'clock tiffin so that the 10-30 to 11 A.M. recess meal is usually slight. Children cannot be expected to provide themselves with suitable food, and their health must suffer accordingly.

   The food sheds were cleaner and were being supervised by the school staffs, but the food provided is in many cases unsuitable for children.

SUMMARY OF RESULTS.

SCHOOLS.	Pupils.	CONDITION.		Nits.	CLOTHING.			Anæmia.	Bermatitis.	Sores.	Eczema.	Ringworm.	Leucoderma.	Acne.	Abrasions.	Prickly Heat.
		Fair.	Poor.		Insuffi-cieut.	Dirty.	Bad repair.									
French Convent	780	245	22	70	73	19	11	176	3	14	12	12	14	7	1	7
Methodist Girls'	470	171	32	5	80	13	2	141	4	6	...	2	10	12	...	6
Raffles Girls'	387	98	1	12	...	11	7	31	2	6	3	...	5	8	5	2
Fairfield Girls'	376	141	10	1	127	21	...	43	7	7	...	1	5	3	11	7
St. Anthony's Convent ...	286	83	12	60	55	20	11	64	2	6	1	3	21	1	...	5
Singapore Chinese Girls' ...	221	76	8	...	33	...	1	67	4	1	1	...	4	...	1	...
Totals ...	2,520	814	85	148	368	84	32	522	22	40	17	18	59	31	18	27
Percentages	...	33½	2	5½	14½	2	1	20½								
1924	2,359	39½	3½	8½	17	10½	3	26								

SUMMARY OF RESULTS.—*Continued.*

SCHOOLS.	DEFECTIVE VISION.					EYE AFFECTIONS.							EARS.		NOSE AND THREAT.						
	6/60	6/36	6/24	6/18	6/12	Conjunctivitis.	Phlyetemular Conjunctivitis.	Squint.	Ptosis.	Blopharitis.	Blind 1 eye.	Stye	Oterrhoea.	Partial Deafness.	Tonsils.	Adenoids.	Pharyngitis.	Nasal Ulcer.	Nasal Catarrh.	Never.	Infancy.
French Convent	9	11	12	5	6	15	1	7	...	2	1	...	6	...	19	1	...	2	2	7	212
Methodist Girls'	3	7	9	6	8	30	...	...	...	1	...	1	2	2	11	1	...	...	...	1	85
Raffles Girls'	6	4	5	2	1	6	...	1	...	...	...	2	3	2	9	...	1	...	1	4	48
Fairfield Girls'	2	3	4	...	8	19	...	1	1	1	1	...	19	...	24	2	1	...	13	1	96
St. Anthony's Convent ...	2	2	2	2	5	6	...	1	1	...	1	2	7	1	6	1	...	1	3	1	65
Singapore Chinese Girls' ...	...	1	2	...	...	1	1	4	1	...	...	...	4	3	10	...	...	1	...	...	100
Totals ...	22	28	34	15	28	77	2	14	3	4	3	5	41	8	79	5	2	4	19	14	
Percentages ...	5					2½	1						2	...	3	1½				24½	
1924	6					6	1½						4½	...	17½	3				24	

SUMMARY OF RESULTS.—*Concluded.*

Schools.	Teeth.				Deformilies etc., etc.										Improvements.		
	Caries.	Sordes.	Gingivitis.	Pyorrhoea.	V. H. D.	Bronchitis.	Adenitis.	Naevus.	Bifid Uvulae.	Cleft Palate.	Hallux Valgus.	Supernumerary Digits.	Talipes.	Knock-Knee.	General Condition.	Teeth.	Defective Vision.
French Convent ...	305	125	...	3	3	3	2	...	...	1	...	2	...	...	119	35	35
Methodist Girls' ...	123	64	1	...	...	...	...	1	1	...	...	...	1	...	64	35	23
Raffles Girls'	85	13	...	...	...	1	1	1	1	1	1	...	...	1	18	21	17
Fairfield Girls'	202	143	...	4	1	...	...	...	...	1	...	...	...	...	51	43	8
St. Anthony's Convent ...	154	61	1	1	...	...	1	...	2	1	...	...	...	...	67	33	6
Singapore Chinese Girls' ...	109	42	1	1	1	...	...	...	2	1	...	...	...	...	35	32	3
Totals ...	978	448	3	9	5	4	4	2	6	5	1	2	1	1	354	202	92
Percentages ...	38	17½	...		1½										40	14	72
1924 ...	34	30	...		...										41	15	70

PENANG.

(*b*—STATISTICS OF THE EXAMINATIONS OF SCHOOL CHILDREN IN PENANG SETTLEMENT.

Total Number of Schools.	Number examined.	General condition not normal.	Vaccination required.	Circulatory system diseases.	Respiratory system diseases.	Ury. system disease.	Skin Diseases.	Eyesight not normal.	Ear diseases.	Throat and nose diseases.	Teeth diseased more than 1.	Spleen enlarged.	Specific infectious diseases mostly Yaws.
					Penang	*Island.*							
36	5,026	153	254	29	10	...	697	172	88	467	898	891	76
					Province	*Wellesley.*							
51	4,168	374	374	12	22	...	417	22	4	235	691	551	98
					Dind	*ings.*							
6	348	70	283	...	1	...	108	2	26	...	196	132	9
93	9,542	597	884	41	43	...	1,222	196	118	702	1,785	1,574	183

MALACCA.

(*a*) During the year 18 Government Schools were visited and inspected by the Health Officer, of these, 7 are schools in Malacca Town.

The number of children examined were 609 out of the total of 9,790 boys and girls.

(*b*) Inspection at the vernacular schools were in all cases followed by a visit to the school from the travelling dispensary for treatment of cases of disease.

In town a dresser was detailed for work amongst boys at the High school. During the latter part of the year, lists were prepared by the Inspector of schools, of those boys who were seen, at the time of his routine visits, to be suffering from any ailment.

The travelling dispensary paid one or more visits to 26 Vernacular Schools and 869 children were treated for the following diseases:—

Yaws	472
Wounds	5
Malaria	5
Ankylost:	3
Scabies	201
Ulcers	88
Mumps	16
Abscess	2
Ring-worm	68
Measles	5
Eczema	3

(*c*) Reports were made from time to time upon the sanitary condition of the schools in town, and various improvements were effected.

Five schools were disinfected on one or more occasions.

(*d*) No dangerous infectious diseases were reported from any of the schools. The following cases were notified and necessary action taken:—

Chicken-pox	22 cases	Sungei Bharu.
,,	9 ,,	Lendu.
,,	7 ,,	Sungei Patai.
,,	12 ,,	Limbongan.
,,	1 ,,	Gadek.
,,	2 ,,	High School.
Mumps	12 ,,	Nyalas.
,,	5 ,,	High School.
Measles	1 ,,	,, ,,
,,	3 ,,	St. Francis School.

(*e*) The attention which has been paid latterly to the schools in the country has, I think, been responsible for the general improvement in health which I have noted amongst children of all ages. The visit of the physical director to Malacca has been of incalculable benefit to the improvement of the physical condition of the boys.

In June, 1925, Dr. PAUL RUSSELL a health officer of the Rockefeller Foundation visited a number of schools, and reported upon the prevalence of Hook-worm; he notes that over 90 per cent of the children are infected: the installation of modern latrines is necessary.

(*f*) Summary of School Inspection:—

Physical condition	good	443
,, ,,	fair	124
,, ,,	poor	42
	Total examined	609

Number of children requiring treatment (other than Dental)	136	22·33%
Teeth defective and requiring Dental Treatment	212	34·81%
Skin conditions, including Scabies, Sores, Ulcers and Ring-worm	54	8·83%
Yaws	16	2·63%
Palpable Spleen	49	8·04%
Vaccination marks absent	112	18·3 % *

The following is the percentage spleen rate for the Vernacular Schools inspected:—

School.	*Boys examined.*	*Spleen Palpable.*	*Percentage.*
Tangga Batu	123	1	0·81
Nyalas	110	6	5·45
Alor Gajah	78	0	—
Machap	33	28	84·88
P. Rama	94	4	4·25
Ayer Pa Abas	13	3	23·07
Brisu	10	0	—
Rumbia	18	2	11·11
D. Tunggal	56	4	7·14
Bt. Bharu	82	8	9·51
P. Sebang	12	3	25·0

LABUAN.

All boys in Government schools were systematically examined during the year and results recorded on their school cards. Further special examination as to spleen rates and worm (intestinal) infection were carried out with the following results as tabulated below.

1. Spleen rates:—

English School	3·4%
Malay School	8·5%
Bukit Kallam School	71·0%

Total examined.

English School	59
Malay School	59
Bukit Kallam School	62

2. Worm infection:—

Name.	*Total Examined.*	*Finding.*			*Percentage.*		
		Hook-worm.	*Round-worm.*	*Whip-worm.*	*Hook-worm.*	*Round-worm.*	*Whip-worm.*
English School	48	23	26	3	47·9	54·16	6·25
Malay School	71	33	57	6	46·47	80·28	8·45
Kallam School	51	47	23	4	92·15	45·09	7·84
Lai Boon (Private School)	39	13	25	10	33·3	64·1	25·64
Mrs. Fell (Private School)	11	3	7	2	27·27	63·63	18·18

Treatment of school children followed our findings and was general and specific and was continued in all instances as long as found necessary.

" This percentage cannot be taken as an average for the whole Settlement."

TABLE I.

STAFF.

1. The sanctioned European staff in the Straits Settlements numbers 108 distributed as follows:—

GENERAL.

Principal Civil Medical Officer, Straits Settlements.
One Financial Officer, Medical Department.

HOSPITALS AND DISPENSARIES.

Chief Medical Officer, Singapore.
One Financial Officer, Hospitals, Singapore.
Chief Medical Officer, Penang.
Chief Medical Officer, Malacca.
Senior Surgeon, Singapore.
Nine Medical Officers, Singapore.
Six Medical Officers, Penang.
One Medical Officer, Malacca.
One Medical Officer, Labuan.
Five Supernumerary Medical and Health Officers.
Two Matrons, Class I (One Singapore and one Penang)
Five Matrons, Class II.
Twenty-three Sisters, Singapore.
Eleven Sisters, Penang.
One Sister, Malacca.
Two European Attendants.

HEALTH BRANCH.

Chief Health Officer, Singapore.
Senior Health Officer, Penang.
Four Health Officers, Singapore.
One Health Officer, Malacca.
Three Sanitary Inspectors.
Lay Superintendent, Quarantine Station, Singapore.
Lay Superintendent, Quarantine Station, Penang.
One Sister, Quarantine Station, Singapore.

PATHOLOGICAL BRANCH.

One Pathologist, Singapore.
One Pathologist, Penang.
One Bacteriologist, Singapore.

COLLEGE OF MEDICINE, SINGAPORE.

Principal.
Professor of Physiology.
Professor of Anatomy.
Professor of Medicine.
Professor of Surgery.
Professor of Midwifery and Gynæcology.
Professor of Bacteriology.
Professor of Biology.
Professor of Bio-Chemistry.

LUNATIC ASYLUM, SINGAPORE.

Medical Superintendent.
Three European Attendants.
One Matron, Class II.

ANALYST'S BRANCH.

Analyst, Singapore.
Deputy Analyst, Penang.
Three Assistant Analysts, Singapore.

2. In addition 12 time scale Medical Officers and seven Nursing Sisters are borne on the establishment for service in the Unfederated Malay States, and one time scale Medical Officer for service at the Indian Immigration Depôt, Avadi, Madras, making a total European staff of 127.

The post of Principal Medical Officer, Johore, is also held by a member of the Straits Medical Department.

3. Local qualified medical staff (Specialists, Deputy Medical Officers, Deputy Health Officers, Assistant Medical Officers and Assistant Surgeons) numbered 54.

TABLE II.

FINANCIAL.

1925.

Revenue.

	$ c.	$ c.
Singapore.—		
Hospitals Board	225,700 05	
Medical General	17,088 00	
Health	86,799 35	
Analyst	12,781 50	
		342,368 90
Penang.—		
Hospitals Board	60,455 00	
Payment for Lepers	90,510 00	
Medical General Health Analyst	84,108 00	
		235,073 00
Malacca.—		
Hospitals Board	12,512 68	
Medical General Health	1,164 50	
		13,677 18
Labuan.—		1,557 25
		592,676 33

1. The revenue collected in the Medical Department is classified under three headings, *viz*:—

(*a*) Hospitals Board (Hospitals and Dispensaries).

(*b*) Medical General which includes Medical, Pathological Branch, College of Medicine, Singapore, Lunatic Asylum and Government Analyst's Branch.

(*c*) Health Branch.

2. The income from "Hospitals and Dispensaries" and Lunatic Asylum is paid into the account of the Hospitals Board, which is administered by a Special Committee. In addition to the amounts paid into the Hospitals Board Account as shown above the Board received contributions from Government for the various Settlements as follows:—

	$
Singapore	663,670
Penang	448,014
Malacca	119,340
Labuan	3,460
	1,234,484

3. No revenue is derived from the Pathological Branch.

4. Fees collected under Medical General and Health Branch are paid into the Treasury as General Government Revenue.

5. Fees collected under College of Medicine are paid into the College Fund.

1925.

Expenditure.

	$	c.	$	c.
Singapore.—Hospitals Board			653,437	32
Medical General.—				
Medical, Personal Emoluments ...	58,277	85		
Medical, Other Charges ...	3,703	20		
Pathological Branch, Personal Emoluments	21,067	04		
Pathological Branch, Other Charges	2,991	98		
College of Medicine, Personal Emoluments	91,282	31		
College of Medicine, Other Charges	83,273	73		
Lunatic Asylum, Personal Emoluments	67,080	72		
Analyst Branch, Personal Emoluments	29,118	83		
Analyst Branch, Other Charges	2,257	25		
Health Branch, Personal Emoluments	126,368	09		
Health Branch, Other Charges	120,195	55		
Hospitals and Dispensaries, Personal Emoluments ...	371,969	34		
			977,585	89
			1,631,023	21

			$ c.
Brought forward ...			1,631,023 21
Penang.—Hospitals Board ...		340,779 07	
	$ c.		
Medical General—			
Medical including Pathological Branch, Personal Emoluments	39,757 19		
Medical including Pathological Branch, Other Charges ...	5,500 96		
Analyst Branch, Personal Emoluments	10,264 85		
Analyst Branch, Other Charges			
Health Branch, Personal Emoluments	49,810 24		
Health Branch, Other Charges	85,902 43		
Hospitals and Dispensaries, Personal Emoluments ...	241,448 62		
Federated Malay States Agency Account	1,700 73		
		434,385 02	
			775,164 09
Malacca.—Hospitals Board ...		102,133 65	
Medical General—			
Medical Personal Emoluments	11,232 32		
Medical, Other Charges ...	3,316 34		
Pathological Branch, Personal Emoluments ...	7,656 68		
Pathological Branch, Other Charges	2,333 99		
Health Branch, Personal Emoluments	15,691 38		
Health Branch, Other Charges	7,117 92		
Hospitals and Dispensaries, Personal Emoluments ...	78,159 36		
		125,417 99	
			227,551 64
Labuan			17,424 47
Total ...			$2,651,163 41

The Other Charges of the Hospitals and Dispensaries are shown under the head Hospitals Board Expenditure.

1. The total expenditure of the Medical Department for the Straits Settlements for the year 1925 amounted to $2,651,163.41.

2. Under College of Medicine the expenditure for Personal Emoluments is shown as $91,282.31 and Other Charges as $83,273.73. Half of these amounts were refunded by the Federated Malay States Government.

TABLE III *A*.

Estimated Population, with Birth and Death-rates for the years 1924 and 1925.

Settlement or Province.	Population.		Births.		Deaths.		Birth-ratio per mille.		Death-ratio per mille.	
	Estimated, 1924.	Estimated, 1925.	1924.	1925.	1924.	1925.	1924.	1925.	1924.	1925.
Singapore	469,071	491,583	14,398	15,044	12,574	13,575	30.69	30.87	26.49	27.61
Labuan	5,746	5,694	225	233	197	207	39.15	40.92	34.28	36.35
Penang Island	170,383	173,217	5,752	5,783	5,166	5,201	33.82	33.39	30.32	30.03
Province Wellesley	131,241	131,577	4,451	4,374	3,822	3,735	33.64	33.24	29.12	28.38
Dindings	14,217	15,185	404	433	300	343	28.42	28.51	21.10	22.52
Malacca	170,294	177,010	5,834	5,798	4,299	4,046	34.26	32.76	25.24	22.85
Total ...	960,952	994,266	31,028	31,665	26,358	27,106	32.29	31.98	27.42	27.26

TABLE III *B*.

Quarterly Death-rates for various parts of the Colony during the past 3 years were:—

Year.	1923.				1924.				1925.			
Quarter.	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Singapore Island ...	24.35	29.80	26.90	26.54	24.62	27.14	29.06	25.64	22.91	28.32	28.26	30.85
Penang Island ...	32.85	32.48	29.15	28.64	28.35	31.55	32.29	30.08	28.80	30.91	29.97	31.51
Province Wellesley ..	26.78	31.11	34.02	27.85	27.40	28.82	30.09	30.58	25.31	27.93	29.20	31.15
Dindings ...	23.60	21.14	18.82	23.60	20.86	23.27	22.64	19.24	18.14	26.23	26.23	22.73
Malacca	27.70	30.49	24.25	25.42	26.11	26.76	27.01	24.53	22.25	22.07	21.76	23.44

TABLE III *C*.

POPULATION ESTIMATED RACIALLY AND COLLECTIVELY OF THE STRAITS SETTLEMENTS FOR THE YEARS 1925, 1924 AND 1923.

Settlements.	Europeans.	Eurasians.	Chinese.	Malays.	Indians.	Other Nationalities and Unknown.	Total.		
							1925.	1924.	1923.
Singapore	7,294	5,967	372,472	61,479	37,028	7,343	491,583	469,071	457,571
Penang	1,215	1,562	109,162	36,684	22,874	1,720	173,217	170,383	166,880
Province Wellesley	397	343	35,085	66,676	28,617	459	131,577	131,241	130,618
Dindings	25	25	3,509	5,355	6,253	18	15,185	14,217	13,283
Malacca	537	1,853	51,406	89,852	33,135	227	177,010	170,294	160,886
Labuan	22	14	1,549	3,968	96	45	5,694	5,746	5,972
Total ...	9,490	9,764	573,183	264,014	128,003	9,812	994,266	960,952	935,210

TABLE III *D*.

BIRTHS REGISTERED IN THE STRAITS SETTLEMENTS DURING 1925 AND THEIR RATIO PER MILE OF POPULATION.

Settlement or Province.	Male.	Female.	Total, 1925.	Total, 1924.	Total, 1923.	Total.		
						1925.	1924.	1923.
Singapore	7,736	7,308	15,044	14,398	12,876	30.87	30.69	28,14
Penang	3,008	2,775	5,783	5,752	5,464	33.39	33.77	32.74
Province Wellesley	2,261	2,113	4,374	4,415	4,039	33.24	31.33	30.92
Dindings	224	209	433	404	386	28.51	28.42	29.06
Malacca	3,081	2,717	5,798	5,834	5,462	32.76	34.26	33.95
Labuan	134	99	233	225	229	40.92	39.15	38.34
Total ...	16,444	15,221	31,665	31,028	28,456	31.98	32.29	30.43

TABLE III *E*.

BIRTHS REGISTERED IN THE STRAITS SETTLEMENTS DURING 1925 ACCORDING TO NATIONALITIES.

Settlement or Province.	Europeans.		Eurasians.		Chinese.		Malays.		Indians.		Japanese.		Other Nationalities.		Total.	
	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.
Singapore	135	21.72	180	31,667	11,351	30.47	2,336	38.76	713 S. 159 N.	23.13	79	29.75	91	12.39	15,044	30.87
Penang	49	40.33	46	29.45	3,769	34.53	1,253	34 16	572 S. 39 N.	26.71	1	...	54	31.98	5,783	33.39
Province Wellesley ...	1	2.52	4	11.66	1,348	38.45	2,385	35.77	618 S. 8 N.	21.88	...	...	10	21.79	4,374	33.24
Dindings	...	...	...	...	125	35.62	196	36.60	112 S. N.	13.79	...	...	...	...	433	28.51
Malacca	13	24 21	74	39.94	1,619	31.49	3,476	38.69	453 S. 4 N.	13.79	1	...	158	70.44	5,798	32.76
Labuan	2	90.90	...	...	59	38.08	164	41.58	3 S. 2 N.	52.08	...	...	3	66.66	233	40.92
Total ...	200	23.78	304	32.07	18,271	31.87	9,810	37.33	2,683	21.25	81	30.46	316	32.21	31,665	31.98

S.—denotes Southern. N.—denotes Northen.

TABLE III *F*.

DEATH REGISTERED IN THE STRAITS SETTLEMENTS IN 1925 ACCORDING TO NATIONALITIES.

Settlements.	Europeans.		Eurasians.		Chinese.		Malays.		Indians.		Other Nationalities and Unknown.		Total.	
	No.	Ratio p. mille.	No.	Ratio p. mille.	No.	Ratio p. mille.	No.	Ratio p. mille.	No.	Ratio p. mille.	No.	Ratio p. mille.	No.	Ratio p. mille.
Singapore	51	6.99	106	17.76	10,595	28.45	1,801	29.29	924	24.95	98	13.35	13,575	27.61
Penang	10	8.23	32	20.49	3,134	28.71	1,158	31.55	820	35.85	47	27.33	5,201	30.03
Province Wellesley	...	...	3	8.75	1,065	30.35	1,704	25.56	920	32.15	43	93.68	3,735	28.38
Dindings	...	...	1	40.00	100	28.50	144	26.87	95	15.19	2	111.10	342	22.52
Malacca	3	5.59	39	21.05	1,346	26.18	2,160	24.04	437	13.19	61	268.72	4,046	22.85
Labuan	...	...	...	...	43	27.76	157	39.57	1	10.42	6	133.33	207	36.35
Total ...	64	6.74	181	18.54	16,283	28.41	7,124	26.98	3,197	24.98	257	26.19	27,106	27.26

TABLE III *G*.

Deaths registered in the Straits Settlements in 1925 under different group of Ages.

Ages.	Singapore.	Penang.	Province Wellesley.	Dindings.	Malacca.	Labuan.	Total.
Uuder 3 months	1,660	527	461	45	870	33	3,596
3 months and under 1 year	1,499	385	154	23	443	27	2,531
1 year to 5 years	1,262	546	599	58	350	31	2,846
5 years to 10 years	346	156	181	11	137	7	838
10 years to 20 years	544	234	171	16	148	9	1,122
20 years to 25 years	716	276	178	19	138	2	1,329
25 years to 35 years	2,038	741	445	33	488	16	3,761
35 years to 45 years	1,998	721	376	54	450	14	3,613
45 years to 55 years	1,610	579	341	29	358	12	2,929
55 years to 75 years	1,510	771	592	39	508	36	3,456
75 years and above	366	187	230	15	155	20	973
Unknown	26	78	7	...	1	...	112
Total ...	13,575	5,201	3,735	342	4,046	207	27,106

TABLE III *H*.

Table showing the Infantile Mortality (under one year) in the Straits Settlements including children born elsewhere.

Settlements.	Births.	Deaths.	Ratio per mille of Births.		
			1925.	1924.	1923.
Singapore	15,044	3,159	209.98	219.75	226.70
Penang	5,783	922	159.43	167.24	160.87
Province Wellesley	4,374	615	140.60	144.51	158.46
Dindings	433	68	157.04	143.56	111.40
Malacca	5,798	1,313	226.46	253.34	258.70
Labuan	233	66	283.26	235.56	227.07
Total ...	31,665	6,143	194.00	204.76	208.96

TABLE III *I*.

Table showing the Infantile Mortality (children under one year) in the Straits Settlements and Nationalities, excluding children born elsewhere.

Nationalities.	Singapore.			Penang.			Province Wellesley.			Dindings.			Malacca.			Labuan.			Total.		
	Deaths.	No. born elsewhere.	Ratio.	Deaths.	No. born elsewhere.	Ratio.	Deaths.	No. born elsewhere.	Ratio.	Deaths.	No. born elsewhere.	Ratio.	Deaths.	No. born elsewhere.	Ratio.	Deaths.	No. born elsewhere.	Ratio.	Deaths.	No. born elsewhere.	Ratio.
Europeans	3	2	22.22	1	...	20.41	...	...	...	...	...	...	...	...	...	...	...	...	4	...	220.00
Eurasians	28	...	155.55	2	...	43.48	1	...	250.00	...	...	...	...	...	108.11	...	...	...	39	...	128.29
Chinese	2,146	151	189.06	558	27	148.05	192	4	142.43	18	4	144.00	345	6	213.09	14	1	254.24	3,273	193	179.14
Malays	657	50	281.25	200	5	159.62	264	3	110.73	26	1	132.65	832	1	239.36	45	4	274.39	2,024	64	206.32
Southern Indians	98	10	137.45	113	6	193.33	134	5	217.25	17	2	151.79	100	4	220.75	...	...	...	462	27	194.85
Northern Indians	8	2	50.31	3	1		2	...		...	...	...	1	...	250.00	...	...	...	14	3	66.04
Japanese	1	1	12.66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	12.35
Other Nations and Unknown ...	2	...	21.98	6	...	109.09	9	1	900.00	..	...	...	16	...	101.27	1	1	333.33	34	2	107.59
Total ...	2,943	216	09.63	883	39	152.69	602	13	137.63	61	7	140.88	1,302	11	224.56	60	6	257.51	5,851	292	184.78

TABLE III *J*.

Deaths registered in the Straits Settlements as regards Certificates in the year 1925.

Particulars.	Singapore.	Penang.	Province Wellesley.	Dindings.	Malacca.	Labuan.	Total.
Died in Hospitals	3,516	1,016	504	60	405	17	5,518
Certified by Medical Practitioners	3,121	667	...	...	178	7	3,873
Certified by Registering Officers after death	4,084	2,304	...	...	532	3	6,923
Uncertified	2,854	1,214	3,231	282	2,931	180	10,692
Total ...	13,575	5,201	3,735	342	4,046	207	27,106

TABLE IV.

Meteorological Returns for the Straits Settlements for the year 1925, supplied by Dr. GILBERT E. BROOKE, Chief Health Officer, Singapore.

METEOROLOGICAL RETURN FOR THE YEAR 1925.

Singapore.

—	TEMPERATURE.						RAINFALL.		WINDS.	REMARKS.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in m. m.	Degree of Humidity.	General Direction.	
January ...	143.0	69.0	85.2	72.5	12.7	77.7	489.99	84	N.E.	
February ...	139.0	69.8	84.2	72.2	12.0	77.1	344.26	82	N.E.	
March ...	145.3	70.7	86.4	73.0	13.4	78.7	153.33	81	N.E.	
April ...	145.4	71.8	87.9	74.7	13.2	80.1	116.39	82	S.E.	
May ...	144.1	72.7	88.8	75.5	13.3	81.1	250.81	80	S.E.S.W.	
June ...	142.7	73.2	88.1	77.2	10.9	81.8	143.55	78	S.E.	
July ...	146.1	71.7	88.1	75.7	12.4	80.4	106.09	78	S.E.	
August ...	141.9	71.4	88.0	75.2	12.8	80.2	161.44	79	S.E.	
September ...	143.3	70.9	87.4	75.1	12.3	80.1	180.26	80	S.E.	
October ...	143.7	71.3	87.2	74.1	13.1	79.5	376.00	82	S.W.	
November ...	145.5	70.7	86.8	73.8	13.0	78.6	278.18	80	N.W.	
December ...	130.4	70.9	84.0	73.4	10.6	77.9	359.02	86	N.W.	
Mean ...	142.6	71.2	86.8	74.4	12.4	79.4	2,959.32 Total	81		

Penang.

METEOROLOGICAL RETURN FOR THE YEAR 1925.

—	TEMPERATURE.						RAINFALL.		WINDS.	REMARKS.
	Solar Maximum.	Mi imum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in m.m.	Degree of Humidity.	General Direction.	
January	154	68	93	69	24	80.7	116	85	N.W.	
February	160	55	94	69	25	81.0	86	70	N.W.	
March	164	64	94	68	26	81.0	500	76	N.W.	
April	156	69.5	93.5	70	23.5	82.0	338	77	N.W.	
May	161	71	93	71	22	81.9	232	76	S.	
June	158	69	91.5	70	21.5	80.8	300	74	S.	
July	157	69	93	70	23	81.0	136	71	S.	
August	155	69	92	70	22	80.3	227	73	S.	
September ..	157	69	92	69.5	22.5	80.7	323	76	N.W.	
October	157	68	92	69.5	22.5	79.8	900	80	N.W.	
November ...	160	69	92	69	23	80.5	475	76	N.E.	
December ...	161	69	93	70	23	80.9	105	74	N.W.	
Mean ...	158	67.4	92.6	69.6	23.1	80.9	37.38 Total	75		

METEOROLOGICAL RETURN FOR THE YEAR 1925.

Malacca.

—	Temperature.					Rainfall.		Winds.	Remarks.
	Solar Maximum.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in m.m.	Degree of Humidity.	General Direction.	
January	119	87	73	14	82	283.5	83	N.E.	
February	117	87	73	14	82	126.0	82	N.E.	
March	121	89	73	16	83	94.5	79	N.	
April	117	88	74	14	82	191.8	85	N.E.	
May	115	89	74	15	83	200.6	81	N.E.	
June	115	88	74	14	82	196.4	85	N.E.	
July	112	88	73	15	82	245.4	82	N.E.	
August	117	88	74	14	82	278.6	81	N.E.	
September ...	119	89	74	15	83	400.1	81	N.E.	
October	113	88	74	14	83	285.8	84	Under Repair	
November ...	108	88	74	14	83	208.2	84		
December	106	88	73	15	83	261.0	83		
Mean ...	114	964	73.7	14.5	82.5	2726.5 Total	82		

METEOROLOGICAL RETURN FOR THE YEAR 1925.

Labuan.

—	Temperature.					Rainfall.		Winds.	Remarks.
	Solar Maximum.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in m.m.	Degree of Humidity.	General Direction.	
January ...	146	84.6	75.1	12.5	79.8	252.0	88	N. & N. W.	
February ...	144	84.3	75.0	6.7	79.6	314.9	89	,,	
March ...	147	85.7	75.4	6.0	80.5	311.5	88	N. W.	
April	145	87.2	76.0	6.8	81.6	171.0	87	,,	
May	144	88.9	77.8	7.3	83.3	40.9	85	,,	
June	141	88.2	77.0	8.5	82.6	211.5	85	,,	
July	136	84.4	73.5	8 5	78.9	152.5	86	,,	
August ...	140	81.7	76.6	8.1	79.1	260.0	86	,,	
September ...	138	86.8	74.8	8.9	80.7	564.5	86	,,	
October ...	138	85.5	76.3	8.0	80.9	347.0	84	,,	
November ...	139	86.0	76.7	7.8	81.3	215.5	85	,,	
December ...	135	84.7	75.1	6.7	79.9	309.0	87	N. E.	
Mean ...	141	85.7	75.7	17.11	80.6	3150.3 Total	86		

TABLE V.

Return of Diseases and Deaths (In-patients) for the year 1925,

(i)—SINGAPORE HOSPITALS.

Diseases.	Remaining in Hospital at the end of 1924.	Yearly Total.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	Remarks.
		Admissions.	Deaths.			
I.—Epidemic, Endemic, and Infectious Diseases,						
1. Enteric Group—						
(*a*) Typhoid Fever ...	5	118	65	123	7	
(*b*) Paratyphoid A. ...	...	...	...	...	...	
(*c*) Paratyphoid B. ...	2	12	5	14	1	
(*d*) Type not defined	...	...	...	...	...	
2. Typhus	...	...	...	...	...	
3. Relapsing Fever ...	...	...	...	...	...	
4. Undulant Fever ...	...	...	...	...	...	
5. Malaria—						
(*a*) Tertian ...	1	419	11	420	22	
(*b*) Quartan ...	5	86	8	91	5	
(*c*) Aestivo-autumnal	20	1,674	233	1,694	78	
(*d*) Cachexia ...	28	588	17	616	34	
(*e*) Blackwater ...	...	...	...	...	...	
(*f*) Unclassified ...	12	509	3	521	9	
6. Small-pox ...	...	...	...	...	...	
7. Measles	1	3	...	4	1	
8. Scarlet Fever ...	...	...	...	...	...	
9. Whooping Cough ...	...	...	...	...	...	
10. Diphtheria ...	...	6	1	6	1	
11. Influenza	1	119	1	120	...	
12. Miliary Fever ...	...	...	...	...	...	
13. Mumps	...	20	...	20	...	
14. Cholera	...	1	...	1	...	
15. Epidemic diarrhœa ...	...	...	...	...	...	
16. Dysentery—						
(*a*) Amœbic ...	13	202	99	215	3	
(*b*) Bacillary ...	13	313	129	326	8	
(*c*) Undefined or due to other causes ...	4	137	6	141	6	
17. Plague—						
(*a*) Bubonic ...	...	13	8	13	...	
(*b*) Pneumonic ...	...	...	...	...	...	
(*c*) Septicæmic ...	...	4	4	4	...	
(*d*) Undefined ...	...	...	...	...	...	
18. Yellow Fever ...	...	...	...	...	..	
19. Spirochætosis ictero-hæmorrhagica ...	...	1	1	1	...	
20. Leprosy	97	120	22	217	77	
21. Erysipelas	...	7	...	7	...	
22. Acute Poliomyelitis ...	...	...	...	...	...	
23. Encephalitis Lethargica	...	...	...	...	...	
24. Epidemic Cerebro-spinal Fever ...	...	8	5	8	...	
Carried forward ...	202	4,360	618	4,562	252	

Return of Diseases and Deaths (In-patients) for the year 1925, at the Singapore Hospitals.—*Continued.*

Diseases.	Remaining in Hospital at the end of 1924.	Yearly Total.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	202	4,360	618	4,562	252	
Infectious Diseases.—*Cntd.*						
25. Other Epidemic Diseases—						
(*a*) Rubeola (German Measles ...	...	...	...	...	...	
(*b*) Varicella (Chicken-pox ...	...	4	...	4	...	
(*c*) Kala-azar ...	...	...	...	...	...	
(*d*) Phlebotomus Fever ...	...	...	...	...	...	
(*e*) Dengue ...	...	15	...	15	1	
(*f*) Epidemic Dropsy	...	...	...	...	...	
(*g*) Yaws ...	...	1	...	1	...	
(*h*) Trypanosomiasis	...	...	...	...	...	
26. Glanders	...	...	...	...	...	
27. Anthrax ...	...	...	...	...	...	
28. Rabies	...	...	...	...	...	
29. Tetanus	1	17	9	18	1	
30. Mycosis	...	...	...	...	...	
31. Tuberculosis, Pulmonary and Laryngeal ...	76	919	373	995	71	
32. Tuberculosis of the Meninges or Central Nervous System ...	...	11	9	11	...	
33. Tuberculosis of the Intestines or Peritoneum	1	44	40	45	...	
34. Tuberculosis of the Vertebral Column ...	...	...	...	...	...	
35. Tuberculosis of Bones and Joints ...	9	46	2	55	11	
36. Tuberculosis of Other Organs—						
(*a*) Skin or Subcutaneous Tissue (Lupus)	...	...	...	...	...	
(*b*) Bones ...	...	2	...	2	...	
(*c*) Lymphatic System	1	12	1	13	1	
(*d*) Genito-urinary ...	...	...	...	...	...	
(*e*) Other organs ...	...	21	2	21	2	
37. Tuberculosis disseminated—						
(*a*) Acute ...	...	6	6	6	...	
(*b*) Chronic ...	...	...	...	...	...	
Carried forward ...	290	5,458	1,060	5,748	339	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1925, AT THE SINGAPORE HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	290	5,458	1,060	5,748	339	
NERVOUS SYSTEM.—*Contd.*						
38. Syphilis—						
(*a*) Primary ...	6	333	...	339	22	
(*b*) Secondary ...	82	872	18	954	63	
(*c*) Tertiary ...	9	109	57	118	14	
(*d*) Hereditary ...	...	14	4	14	...	
(*e*) Period not indicated	...	...	...	...	...	
39. Soft Chancre ...	32	426	...	458	30	
40. A.—Gonorrhœa and its complications ...	12	304	...	316	13	
B.—Gonorrhœal Ophthalmia ...	1	10	...	11	2	
C.—Gonorrhœl Arthritis	17	253	1	270	12	
D.—Granuloma Venereum	...	1	...	1	1	
41. Septicæmia ...	...	7	6	7	...	
42. Other Infectious Diseases	...	4	3	4	...	
II.—GENERAL DISEASES NOT MENTIONED ABOVE.						
43. Cancer or other malignant Tumours of the Buccal Cavity ...	2	11	8	13	1	
44. Cancer or other malignant Tumours of the Stomach or Liver ...	1	35	24	36	1	
45. Cancer or other malignant Tumours of the Peritoneum, Intestines, Rectum ...	1	11	1	12	1	
46. Cancer or other malignant Tumours of the Female Genital Organs	...	14	3	14	...	
47. Cancer or other malignant Tumours of the Breast	1	10	3	11	1	
48. Cancer or other malignant Tumours of the Skin	...	13	...	13	...	
Carried forward ...	454	7,885	1,188	8,339	500	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1925, AT THE SINGAPORE HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	454	7,885	1,188	8,339	500	
GENERAL DISEASES NOT MENTIONED ABOVE.—*Contd.*						
49. Cancer or other malignant Tumours of Organs not Specified ...	2	25	5	27	2	
50. Tumours non-malignant	1	45	14	46	4	
51. Acute Rheumatism ...	2	45	...	47	...	
52. Chronic Rheumatism ...	...	...	...	...	...	
53. Scurvy (including Barlow's Disease) ...	...	...	...	...	...	
54. Pellagra	...	...	...	...	...	
55. Beri-beri	93	756	126	849	129	
56. Rickets	1	1	...	2	...	
57. Diabetes (not including insipidus) ...	..	15	3	15	4	
58. Anæmia— ...						
(*a*) Pernicious ...	...	6	6	6	...	
(*b*) Other Anæmias and Chlorosis ...	...	46	9	46	2	
59. Diseases of the Pituitary Body ...	...	...	...	...	...	
60. Diseases of the Thyroid Gland—						
(*a*) Exopthalmic Goitre	...	...	...	...	...	
(*b*) Other diseases of the Thyroid Gland, Myxœdema	...	...	...	...	...	
61. Diseases of the Parathyroid Glands ...	...	...	...	...	...	
62. Diseases of the Thymus	...	...	...	...	...	
63. Diseases of the Suprarenal Glands ...	...	...	...	...	...	
64. Diseases of the Spleen	...	10	2	10	3	
65. Leukæmia—						
(*a*) Leukæmia ...	...	4	3	4	...	
(*b*) Hodgkin's Disease ...	...	...	...	...	...	
66. Alcoholism ...	...	33	...	33	...	
67. Chronic poisoning by mineral substances (lead, mercury, etc.)	...	...	...	...	...	
Carried forward ...	553	8,871	1,356	9,424	644	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1925, AT THE SINGAPORE HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	533	8,871	1,356	9,424	644	
GENERAL DISEASES NOT MENTIONED ABOVE.—*Contd.*						
68. Chronic poisoning by organic substances (Morphia, Cocaine, etc.)	...	...	...	...	...	
69. Other General Diseases—						
Auto-intoxication ...	...	...	...	...	...	
Purpura Hæmorrhagica	...	...	...	...	...	
Hæmophilia ...	...	...	...	...	...	
Diabetes Insipidus ...	...	...	...	...	...	
III.—AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.						
70. Encephalitis (not including Encephalitis Lethargica) ...	...	...	...	...	...	
71. Meningitis (not including Tuberculous Meningitis or Cerebrospinal Meningitis ...	...	18	16	18	...	
72. Locomotor Ataxia ...	7	21	...	28	9	
73. Other Affections of the Spinal Cord ...	4	32	6	36	2	
74. Apoplexy—						
(*a*) Hæmorrhage ...	3	6	6	9	...	
(*b*) Embolism ...	...	...	...	...	...	
(*c*) Thrombosis ...	...	...	...	...	...	
75. Paralysis—						
(*a*) Hemiplegia ...	15	58	2	73	27	
(*b*) Other Paralyses	8	59	...	67	9	
76. General Paralysis of the Insane	...	23	13	23	10	
77. Other forms of Mental Alienation ...	574	513	92	1,087	644	
78. Epilepsy	...	17	...	17	4	
79. Eclampsia, Convulsions (non-puerperal) 5 years or over ...	...	1	1	1	...	
Carried forward ...	1,164	9,619	1,492	10,783	1,349	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1925, AT THE SINGAPORE HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,164	9,619	1,492	10,783	1,349	
AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.—*Contd.*						
80. Infantile Convulsions	...	14	5	14	...	
81. Chorea	...	2	...	2	...	
82. A.—Hysteria ...	1	6	...	7	...	
B.—Neuritis ...	8	134	...	142	8	
C.—Neurasthenia ...	2	10	...	12	2	
83. Cerebral Softening ...	1	...	...	1	...	
84. Other affections of the Nervous System, such as Paralysis Agitans	15	79	16	94	20	
85. Affections of the Organs of Vision—						
(*a*) Diseases of the Eye ...	4	39	...	43	4	
(*b*) Conjunctivitis ...	10	187	...	197	12	
(*c*) Trachoma ...	...	...	...	...	...	
(*d*) Tumours of the Eye ...	...	...	...	...	...	
(*e*) Other affections of the Eye ...	27	13	...	40	25	
86. Affections of the Ear or Mastoid Sinus ...	4	115	1	119	3	
IV.—AFFECTIONS OF THE CIRCULATORY SYSTEM.						
87. Pericarditis ...	...	11	9	11	1	
88. Acute Endocarditis or Myocarditis ...	...	23	18	23	...	
89. Angina Pectoris ...	...	2	...	2	1	
90. Other Diseases of the Heart—						
(*a*) Valvular—	...	50	8	50	...	
Mitral ...	3	18	1	21	7	
Aortic ...	...	25	11	25	3	
Tricuspid ...	...	...	...	...	...	
Pulmonary ...	...	...	...	...	...	
(*b*) Myocarditis ...	...	6	1	6	1	
91. Diseases of the Arteries—						
(*a*) Aneurism ...	1	9	4	10	2	
(*b*) Arterio-Sclerosis	8	23	13	31	5	
(*c*) Other diseases ...	2	43	8	45	6	
Carried forward ...	1,250	10,428	1,587	11,678	1,449	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1925, AT THE SINGAPORE HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,250	10,428	1,587	11,678	1,449	
AFFECTIONS OF THE CIRCULATORY SYSTEM.—*Contd.*						
92. Embolism or Thrombosis (non-cerebral) ...	...	1	1	1	...	
93. Diseases of the Veins—						
Hæmorrhoids ...	...	55	...	55	2	
Varicose Veins ...	...	6	...	6	2	
Phlebitis	...	2	...	2	...	
94. Diseases of the Lymphatic System—						
Lymphangitis	...	2	...	2	...	
Lymphadenitis, Bubo (non-specific) ...	10	142	...	152	13	
95. Hæmorrhage of undetermined cause ...	...	...	...	...	...	
96. Other affections of the Circulatory System ...	...	3	3	3	...	
V.—AFFECTIONS OF THE RESPIRATORY SYSTEM.						
97. Diseases of the Nasal Passages—						
Adenoids ...	...	10	...	10	...	
Polypus ...	...	1	...	1	1	
Other diseases ...	2	38	...	40	1	
Coryza ...	...	4	...	4	...	
98. Affections of the larynx—						
Laryngitis ...	...	9	...	9	...	
99. Bronchitis—						
(*a*) Acute ...	11	493	2	504	14	
(*b*) Chronic ...	7	178	...	185	15	
100. Broncho-Pneumonia ...	3	144	74	147	2	
101. Pneumonia—						
(*a*) Lobar ...	8	309	143	317	18	
(*b*) Unclassified ...	2	96	27	98	2	
102. Pleurisy, Empyema ...	1	36	7	37	4	
103. Congestion of the Lungs	...	...	...	...	...	
104. Gangrene of the Lungs	...	5	5	5	...	
105. Asthma	6	129	1	135	10	
106. Pulmonary Emphysema	...	...	...	...	...	
Carried forward ...	1,300	12,091	1,850	13,391	1,533	

RETURN OF DISEASES AND DEATHS IN 1925, AT THE SINGAPORE HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at end of 1925.	REMARKS.
		Admissions	Deaths.			
Brought forward ...	1,300	12,091	1,850	13,391	1,533	
AFFECTIONS OF THE RESPIRATORY SYSTEM.						
107. Other affections of the Lungs—						
Pulmonary Spirochætosis ...	...	...	...	...	...	
VI.—DISEASES OF THE DIGESTIVE SYSTEM.						
108. A.—Diseases of Teeth or Gums—						
Caries, Pyorrhæa, etc. ...	4	39	...	43	2	
B.—Other affections of the mouth—						
Stomatitis ...	...	4	...	4	...	
Glossitis, etc. ...	...	3	...	3	...	
109. Affections of the Pharynx or Tonsils—						
Tonsilitis ...	5	92	1	97	2	
Pharyngitis ...	1	15	...	16	...	
110. Affections of the Oesophagus	...	...	...	...	..	
111. A.—Ulcer of the Stomach ...	4	40	14	44	1	
B.—Ulcer of the Duodenum ...	...	16	3	16	3	
112. Other affections of the Stomach—						
Gastritis	4	189	8	193	5	
Dyspepsia, etc. ...	3	115	...	118	...	
113. Diarrhœa and Enteritis—						
Under two years ...	...	58	17	58	1	
114. Diarrhœa and Enteritis—						
Two years and over	21	296	6	317	6	
Colitis	2	23	3	25	1	
Ulceration ...	...	67	5	67	1	
114A. Sprue	...	4	...	4	...	
115. Ankylostomiasis ...	33	935	35	968	67	
Carried forward ...	1,379	14,030	1,942	15,409	1,623	

RETURN OF DISEASES AND DEATHS IN 1925, AT THE SINGAPORE HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining. in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,379	14,030	1,942	15,409	1,623	
DISEASES OF THE DIGESTIVE SYSTEM.—*Continued.*						
116. Diseases due to Intestinal Parasites—						
(*a*) Cestoda (Tænia)	...	10	...	10	2	
(*b*) Trematoda (Flukes)	...	...	...	...	...	
(*c*) Nematoda (other than Ankylostoma)—						
Ascaris ...	1	76	1	77	1	
(*d*) Coccidia ...	...	...	...	...	...	
(*e*) Other parasites ...	...	...	...	...	...	
(*f*) Unclassified ...	...	...	...	...	...	
117. Appendicitis ...	5	79	10	84	7	
118. Hernia	3	115	10	118	3	
119. A.—Affections of the Anus, Fistula, etc.	6	87	1	93	4	
B.—Other affections of the Intestines—						
Enteroptosis ...	...	1	...	1	...	
Constipation ...	...	113	...	113	...	
120. Acute Yellow Atrophy of the Liver ...	...	...	...	...	...	
121. Hydatid of the Liver ...	...	...	...	...	...	
122. Cirrhosis of the Liver—						
(*a*) Alcoholic ...	...	...	...	...	...	
(*b*) Other forms ...	...	...	...	...	...	
123. Biliary Calculus ...	...	...	...	...	...	
124. Other affections of the Liver—						
Abscess	...	16	4	16	2	
Hepatitis	...	7	...	7	...	
Cholecystitis ...	1	26	16	27	1	
Jaundice	1	23	1	24	2	
125. Diseases of the Pancreas	1	11	7	12	...	
126. Peritonitis (of unknown cause)	...	24	16	24	...	
127. Other affections of the Digestive System ...	9	184	45	193	5	
Carried forward ...	1,406	14,802	2,053	16,208	1,650	

Return of Diseases and Deaths in 1925, at the Singapore Hospitals.—*Continued.*

Diseases.	Remaining in Hospital at the end fo 1924.	Yearly Total.		Total cases Treated.	Remaining in Hospital at the end of 1925.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	1,406	14,802	2,053	16,208	1,650	
VII.—Diseases of the Genitourinary System (Non-Venereal).						
128. Acute Nephritis ...	7	109	21	116	2	
129. Chronic Nephritis ...	16	211	12	227	22	
130. A.—Chyluria ...	...	3	...	3	...	
B.—Schistosomiasis ...	...	1	1	1	...	
131. Other affections of the Kidneys, Pyelitis, etc.	3	71	53	74	1	
132. Urinary Calculus ...	...	7	2	7	...	
133. Diseases of the Bladder—						
Cystitis	3	42	4	45	1	
134. Diseases of the Urethra—						
(*a*) Stricture ...	...	51	2	51	4	
(*b*) Other ...	1	68	7	69	3	
135. Diseases of the Prostate—						
Hypertrophy ...	...	...	...	...	...	
Prostatitis ...	...	7	...	7	1	
136. Diseases (non-venereal) of the Genital Organs of Man—						
Epididymitis ...	...	21	...	21	...	
Orchitis	3	30	...	33	2	
Hydrocele ...	2	63	...	65	4	
Ulcer of the Penis, etc.	2	79	...	81	5	
137. Cysts or other non-malignant Tumours of the Ovaries ...	...	8	1	8	...	
138. Salpingitis—Abscess of the Pelvis ...	...	13	1	13	...	
139. Uterine Tumours (non-malignant) ...	...	10	...	10	...	
140. Uterine Hæmorrhage (non-puerperal) ...	...	...				
141. A.—Metritis ...	...	2	...	2	...	
B.—Other affections of the Female Genital Organs—	2	43	6	45	4	
Displacements of Uterus ...	...	18	...	18	1	
Erosion of Cervix ...	...	10	1	10	...	
Carried forward ...	1,445	15,669	2,164	17,114	1,700	

Return of Diseases and Deaths in 1925, at the Singapore Hospitals.—*Continued.*

Diseases.	Remaining in Hospital at the end of 1924.	Yearly Total.		Total cases Treated.	Remaining in Hospital at the end of 1925.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	1,445	15,669	2,164	17,114	1,700	
Diseases of the Genito-urinary System (Non-Venereal).—*Contd.*						
Other Affection of the Female General Organs.						
Dysmenorrhœa	...	3	...	3	...	
Lencorrhœa	...	2	...	2	...	
Other Diseases	...	4	1	4	...	
142. Diseases of the Breast (non-puerperal)—						
Mastitis	...	1	...	1	...	
Abscess of Breast, etc.	...	14	...	14	...	
VIII.—Puerperal State.						
143. A.—Normal Labour ...	33	999	...	1,032	28	
B.—Accidents of Pregnancy—						
(*a*) Abortion ...	...	11	...	11	...	
(*b*) Ectopic Gestation ...	1	2	...	3	1	
(c) Other accidents of Pregnancy ...	1	94	...	95	2	
144. Puerperal Hæmorrhage	...	3	...	3	...	
145. Other accidents of Parturition	10	262	23	272	11	
146. Puerperal Septicæmia	...	4	4	4	...	
147. Phlegmasia Dolens ...	...	...	...	...	...	
148. Puerperal Eclampsia ...	...	12	5	12	...	
149. Sequelæ of Labour ...	...	...	...	...	...	
150. Puerperal affections of the Breast ...	...	...	...	...	...	
IX.—Affections of the Skin and Cellular Tissues.						
151. Gangrene ...	...	4	...	4	1	
152. Boil—	1	28	...	29	2	
Carbuncle ...	3	23	1	26	2	
153. Abscess—	6	315	1	321	8	
Cellulitis	3	145	7	148	9	
Whitlow	1	55	...	56	1	
154. A.—Tinea ...	...	15	...	15	...	
B.—Scabies ...	3	145	...	148	4	
Carried forward ...	1,507	17,810	2,206	19,317	1,769	

RETURN OF DISEASES AND DEATHS IN 1925, AT THE SINGAPORE HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,507	17,810	2,206	19,317	1,769	
AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.—*Contd.*						
155. Other Diseases of the Skin—						
Erythema, Dermatitis, etc. ...	1	17	...	18	...	
Urticaria	1	9	...	10	...	
Eczema	4	142	...	146	...	
Herpes	...	4	...	4	...	
Psoriasis	...	7	...	7	...	
Elephantiasis ...	1	12	...	13	...	
Myiasis	...	...	...	...	...	
Ulcers	70	1,331	10	1,401	131	
Cutaneous Leishmaniasis ...	...	...	...	...	...	
X.—DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS).						
156. Diseases of the Bones—						
Osteitis	...	8	1	8	...	
157. Diseases of Joints—						
Arthritis	4	88	...	92	...	
Synovitis	...	11	...	11	1	
158. Other Diseases of the Bones or Organs of Locomotion ...	13	115	2	128	8	
XI.—MALFORMATIONS.						
159. Malformations—						
Harelips	...	8	...	8	1	
Hypospadias ...	...	...	...	...	...	
Spina Bifida, etc. ...	...	9	2	9	...	
XII.—DISEASES OF INFANCY.						
160. Congenital Debility ...	...	1	1	1	...	
161. Premature Birth ...	...	...	...	...	...	
162. Other affections of Infancy	...	3	...	3	...	
163. Infant neglect (infants of three months or over)	...	...	...	...	...	
Carried forward ...	1,601	19,572	2,222	21,176	1,910	

RETURN OF DISEASES AND DEATHS IN 1925, AT THE SINGAPORE HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions	Deaths.			
Brought forward ...	1,601	15,972	2,222	21,176	1,910	
XIII.—AFFECTIONS OF OLD AGE.						
164. Senility	7	7	1	14	2	
Senile Dementia ...	...	1	1	1	...	
XIV.—AFFECTIONS PRODUCED BY EXTERNAL CAUSES.						
165. Suicide by Poisoning ...	...	4	4	4	...	
166. Corrosive Poisoning (intentional) ...	...	1	1	1	...	
167. Suicide by Gas Poisoning	...	...	...	...	...	
168. Suicide by Hanging or Strangulation ...	1	3	4	4	...	
169. Suicide by Drowning ...	...	1	1	1	...	
170. Suicide by Firearms ...	...	...	...	...	...	
171. Suicide by cutting or stabbing instruments	...	...	...	...	...	
172. Suicide by jumping from a height ...	...	...	...	...	...	
173. Suicide by crushing ...	...	...	...	...	...	
174. Other suicides ...	...	...	...	...	...	
175. Food Poisoning—Botulism, etc. ...	...	7	...	7	...	
176. Attacks of poisonous animals—						
Snake bite ...	...	1	...	1	...	
Insect bite ...	...	1	...	1	...	
177. Other accidental Poisonings	...	23	3	23	...	
178. Burns (by Fire) ...	1	47	6	48	4	
179. Burns (other than by Fire)	4	90	5	94	5	
180. Suffocation (accidental) ...	...	...	...	...	...	
181. Poisoning by Gas (accidental) ...	...	...	...	...	...	
182. Drowning (accidental)	...	...	...	...	...	
183. Wounds (by Firearms, war excepted) ...	2	13	1	15	4	
184. Wounds (by cutting or stabbing instruments)	14	401	12	415	11	
Carried forward ...	1,630	16,538	2,261	21,805	1,936	

RETURN OF DISEASES AND DEATHS IN 1925, AT THE SINGAPORE HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,630	16,538	2,261	21,805	1,936	
AFFECTIONS PRODUCED BY EXTERNAL CAUSES.—*Contd.*						
185. Wounds (by fall) ...	15	515	12	530	13	
186. Wounds (in mines or Quarters) ...	...	5	...	5	...	
187. Wounds (by Machinery)	...	74	2	74	...	
188. Wounds (crushing, *e.g*, railway accidents, etc.)	3	235	14	238	5	
189. Injuries inflicted by Animals, Bites, Kicks, etc.	...	15	2	15	...	
190. Wounds inflicted on Active Service ...	...	...	...	...	...	
191. Execution of civilians by belligerents ...	...	...	...	...	...	
192. A.—Over fatigue ...	...	...	...	...	...	
B.—Hunger or Thirst	...	...	...	...	...	
193. Exposure to Cold, Frost bite, etc.	...	...	...	...	...	
194. Exposure to heat—						
Heatstroke ...	...	2	1	2	...	
Sunstroke ...	...	1	...	1	...	
195. Lightning Stroke ...	...	...	...	...	...	
196. Electric Shock ...	...	2	...	2	...	
197. Murder by Firearms ...	...	8	8	8	...	
198. Murder by cutting or stabbing instruments	...	5	5	5	...	
199. Murder by other means	...	...	...	...	...	
200. Infanticide (Murder of an infant under one year)	...	...	...	...	...	
201. A.—Dislocation ...	1	24	...	25	...	
B.—Sprain ...	3	69	...	72	2	
C.—Fracture ...	34	356	52	390	39	
202. Other external injuries	10	710	12	720	13	
203. Deaths by Violence of unknown cause ...	...	1	1	1	...	
XV.—ILL-DEFINED DISEASES.						
204. Sudden Death (cause unknown) ...	...	...	...	...	...	
	1,696	18,554	2,370	23,893	2,008	

RETURN OF DISEASES AND DEATHS IN 1925, AT THE SINGAPORE HOSPITALS.—*Concluded.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,696	18,554	2,370	23,893	2,008	
ILL-DEFINED DISEASES.—*Cont.*						
205. A.—Diseases not already specified or ill-defined ...	...	...	...	...	...	
Ascites ...	1	2	...	3	...	
Observation ...	4	212	...	216	2	
Asthenia, Marasmus, etc.	1 ...	62 ...	12 ...	63 ...	3 ...	
Shock ...	...	...	...	...	...	
Hyperpyrexia						
Pyrexia of uncertain Origin	8	636	...	644	4	
B.—Malingering ...	...	2	...	2	...	
C.—Opium Addiction	...	1,341	...	1,341	34	
XVI.—Diseases, the total of which have not caused 10 deaths	102	603	...	705	97	
Total ...	1,812	25,055	2,382	26,867	2,148	

The form shows in the main the arrangement of diseases in the International Nomenclature, 1921 Edition. To save space the unimportant diseases of any class can be grouped in their places as "Other Diseases" of the Class.

1. *i.e.* the year previous to that for which the return is made.
2. "Total cases treated" will, of course, include those remaining in Hospital at the end of the previous year.
3. The figures in this column to be carried on to the next year's return.

(ii)—PENANG HOSPITALS.

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
I.—EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.						
1. Enteric Group—						
(*a*) Typhoid Fever ...	1	13	5	14	1	
(*b*) Paratyphoid A. ...	...	1	...	1	...	
(*c*) Paratyphoid B. ...	...	...	...	...	...	
(*d*) Type not defined	...	...	...	...	...	
2. Typhus	...	...	...	...	...	
3. Relapsing Fever ...	...	...	...	...	...	
4. Undulant Fever ...	...	...	...	...	...	
5. Malaria—						
(*a*) Tertian ...	10	303	1	313	7	
(*b*) Quartan ...	...	25	1	25	1	
(*c*) Aestivo-autumnel	13	1,172	66	1,185	31	
(*d*) Cachexia ...	2	51	3	53	...	
(*e*) Type unclassified	19	354	10	373	4	
6. Small-pox—	...	9	1	9	...	
7. Measles	...	29	...	29	...	
8. Scarlet Fever ...	...	...	...	...	...	
9. Whooping Cough ...	...	...	...	...	...	
10. Diphtheria	...	4	4	4	...	
11. Influenza	...	347	16	347	8	
12. Miliary Fever ...	...	...	...	...	...	
13. Mumps	...	6	...	6	...	
14. Cholera	...	48	20	48	2	
15. Epidemic diarrhœa ...	...	...	...	...	...	
16. Dysentery—						
(*a*) Amœbic ...	6	96	28	102	7	
(*b*) Bacillary ...	3	131	29	134	...	
(*c*) Undefined or due to other causes ...	...	91	2	91	...	
17. Plague—						
(*a*) Bubonic ...	...	...	...	...	...	
(*b*) Pneumonic ...	...	...	...	...	...	
(*c*) Septicæmic ...	...	...	...	...	...	
(*d*) Undefined ...	...	...	...	...	...	
18. Yellow Fever ...	...	...	...	...	...	
19. Spirochætosis ictero-hæmorrhagica ...	...	...	...	...	...	
20. Leprosy	622	291	122	913	749	
21. Erysipelas	..	3	1	3	...	
22. Acute Poliomyelitis ...	...	...	...	...	...	
23. Encephalitis Lethargica	...	...	...	...	...	
24. Epidemic Cerebro-spinal Fever ...	...	8	7	8	...	
Carried forward ...	676	2,982	316	3,658	810	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	676	2,982	316	3,658	810	
EPIDEMIC, ENDEMIC, AND INFECTIONS DISEASES.—*Contd.*						
25. Other Epidemic Diseases—						
(*a*) Rubeola (German Measles) ...	...	...	...	...	...	
(*b*) Varicella (Chicken-pox) ...	...	40	...	40	2	
(*c*) Kala-azar ...	...	...	...	...	...	
(*d*) Phlebotomus Fever	...	...	...	...	...	
(*e*) Dengue ...	1	19	...	20	...	
(*f*) Epidemic Dropsy	...	...	...	...	...	
(*g*) Yaws ...	...	5	...	5	...	
(*h*) Trypanosomiasis	...	...	...	...	...	
26. Glanders	...	...	...	...	...	
27. Anthrax	...	...	...	...	..	
28. Rabies	...	...	...	...	...	
29. Tetanus	...	5	2	5	...	
30. Mycosis	...	...	...	...	...	
31. Tuberculosis, Pulmonary and Laryngeal ...	35	476	220	511	22	
32. Tuberculosis of the Meninges or Central Nervous System ...	...	5	2	5	...	
33. Tuberculosis of the Intestines or Peritoneum	...	...	...	...	...	
34. Tuberculosis of the Vertebral Column ...	...	...	...	...	...	
35. Tuberculosis of Bones and Joints ...	2	18	3	20	1	
36. Tuberculosis of Other Organs—						
(*a*) Skin or Subcutaneous Tissue (Lupus)	...	...	...	...	...	
(*b*) Bones ...	...	...	...	...	...	
(*c*) Lymphatic System	...	...	...	...	...	
(*d*) Genito-urinery ...	. .	...	...	...	...	
(*e*) Other Organs ...	...	...	...	...	...	
37. Tuberculosis disseminated—						
(*a*) Acute ...	...	...	...	...	...	
(*b*) Chronic ...	...	...	...	...	...	
Carried forward ...	714	3,550	543	4,264	835	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS
		Admissions.	Deaths.			
Brought forward ...	714	3,550	543	4,264	835	
EPIDEMIC, ENDEMIC, AND INFECTIONS DISEASES.—*Contd.*						
38. Syphilis—						
(*a*) Primary ...	17	271	...	288	17	
(*b*) Secondary ...	22	143	...	165	5	
(*c*) Tertiary ...	45	199	19	244	23	
(*d*) Hereditary ...	...	4	4	4	...	
(*e*) Period not indicated	...	78	...	78	5	
39. Soft Chancre ...	19	83	...	102	4	
40. A.—Gonorrhœa and its complications ...	3	161	...	164	14	
B.—Gonorrhœal Ophthalmia ...	...	4	...	4	...	
C.—Gonorrhœal Arthritis	3	33	...	36	2	
D.—Granuloma Venereum ...	...	...	...	...	...	
41. Septicæmia ...	...	26	17	26	1	
42. Other Infectious Diseases	1	4	...	5	...	
Tyypanosomiasis ...	...	...	...	...	...	
II.—GENERAL DISEASES NOT MENTIONED ABOVE.						
43. Cancer or other malignant Tumours of the Buccal Cavity ...	...	1	1	1	...	
44. Cancer or other malignant Tumuors of the stomach or Liver ...	...	2	2	2	...	
45. Cancer or other malignant Tumours of the Peritoneum, Intestines, Rectum ...	...	...	...	...	...	
46. Cancer or other malignant Tumours of the Female Genital Organs	...	2	2	2	...	
47. Cancer or other malignant Tumours of the Breast	...	1	1	1	...	
48. Cancer or other malignant Tumours of the Skin	...	...	...	...	...	
Carried forward ..	824	4,562	589	5,386	906	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	824	4,562	589	5,386	906	
GENERAL DISEASES NOT MENTIONED ABOVE.—*Contd.*						
49. Cancer or other malignant Tumours of Organs not specified ...	...	24	9	24	2	
50. Tumours non-malignant	...	23	1	23	1	
51. Acute Rheumatism ...	2	10	...	12	...	
52. Chronic Rheumatism ...	...	...	...	...	...	
53. Scurvy (including Barlow's Diseases) ...	...	...	...	...	...	
54. Pellagra	...	...	...	...	...	
55. Beri-beri	4	22	2	26	1	
56. Rickets	...	...	...	...	...	
57. Diabetes (not including Insipidus) ...	...	6	...	6	...	
58. Anæmia—						
(*a*) Pernicious ...	...	1	...	1	...	
(*b*) Other Anæmias and Chlorosis ...	2	19	3	21	2	
59. Diseases of the Pituitary Body	...	...	...	...	...	
60. Diseases of the Thyroid Gland—						
(*a*) Exopthalmic Goitre	...	...	...	...	...	
(*b*) Other Diseases of the Thyroid Gland, Myxœdema ...	...	...	...	...	...	
61. Diseases of the Parathyroid Glands ...	...	...	...	...	...	
62. Diseases of the Thymus	...	...	...	...	...	
63. Diseases of the Suprarenal Glands ...	...	...	...	...	...	
64. Diseases of the Spleen	...	4	1	4	...	
65. Leukæmia—						
(*a*) Leukæmia ...	...	...	...	...	...	
(*b*) Hodgkin's Disease	...	...	...	...	...	
66. Alcoholism ...	...	9	1	9	1	
67. Chronic poisoning by mineral substances (lead, mercury, etc.)	...	...	...	...	...	
Carried forward ...	832	4,680	606	5,512	913	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	832	4,680	606	5,512	913	
GENERAL DISEASES NOT MENTIONED ABOVE.—*Contd.*						
68. Chronic poisoning by organic substances (Morphia, Cocaine, etc.)	...	500	...	500	28	
69. Other General Diseases—						
Auto-intoxication ...	...	59	2	59	2	
Purpura Hæmorrhagica	...	...	...	...	...	
Hæmophilia ...	...	...	...	...	...	
Diabetes Insipidus ...	...	...	...	...	...	
III.—AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.						
70. Encephalitis (not including Encephalitis Lethargica) ...	...	...	...	...	...	
71. Meningitis (not including Tuberculous Meningitis or Cerebro-spinal Meningitis) ...	1	3	2	4	1	
72. Locomotor Ataxia ...	...	...	...	...	...	
73. Other Affections of the Spinal Cord ...	...	8	4	8		
74. Apoplexy—						
(*a*) Hæmorrhage ...	...	7	7	7	...	
(*b*) Embolism ...	...	...	...	...	...	
(*c*) Thrombosis ...	...	...	...	...	...	
75. Paralysis—						
(*a*) Hemiplegia ...	9	16	2	25	10	
(*b*) Other Paralyses	11	11	3	22	8	
76. General Paralysis of the Insane	...	...	...	...	...	
77. Other forms of Mental Alienation ...	5	98	...	103	2	
78. Epilepsy	...	18	1	18	1	
79. Eclampsia, Convulsions (non-puerperal) 5 years or over ...	...	...	...	...	...	
80. Infantile Convulsions	...	...	...	...	...	
Carried forward ...	858	5,400	627	6,258	965	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at th eend of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	858	5,400	627	6,258	965	
AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.—*Contd.*						
81. Chorea	...	...	...	...	...	
82. A.—Hysteria ...	. .	7	...	7	...	
B.—Neuritis ...	3	26	...	29	1	
C.—Neurasthenia ...	...	11	...	11	...	
83. Cerebral Softening ...	...	...	...	...	...	
84. Other affections of the Nervous System such as Paralysis Agitans	1	3	1	4	1	
85. Affections of the Organs of Vision—						
(*a*) Diseases of the Eye	...	...	...	...	...	
(*b*) Conjunctivitis ...	...	143	...	143	4	
(*c*) Trachoma ...	2	5	...	7	1	
(*d*) Tumours of the Eye	...	...	...	...	...	
(*e*) Other affections of the Eye ...	19	110	1	129	25	
86. Affections of the Ear or Mastoid Sinus ...	...	13	...	13	1	
IV.—AFFECTIONS OF THE CIRCULATORY SYSTEM.						
87. Pericarditis ...	...	3	3	3	...	
88. Acute Endocarditis or Myocarditis ...	...	8	5	8	...	
89. Angina Pectoris ...	...	...	...	...	...	
90. Other Diseases of the Heart—						
(*a*) Valvular—Type unspecified ...	...	40	12	40	7	
Mitral ...	4	44	4	48	1	
Aortic ...	2	5	2	7	...	
Tricuspid ...	...	...	...	...	...	
Pulmonary ...	...	...	...	...	...	
(*b*) Myocarditis ...	...	24	14	24	...	
91. Diseases of the Arteries—						
(*a*) Aneurism ...	. .	3	1	3	...	
(*b*) Arterio-Sclerosis	7	138	22	145	10	
(*c*) Other Diseases ...	2	11	...	13	...	
Carried forward ...	898	5,994	692	6,892	1,016	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	898	5,994	692	6,892	1,016	
AFFECTIONS OF THE CIRCULATORY SYSTEM.—*Contd.*						
92. Embolism or Thrombosis (non-cerebral)	...	...	...	...	...	
93. Diseases of the Veins—						
Hæmorrhoids ...	...	...	...	...	...	
Varicose Veins ...	...	1	...	1	...	
Phlebitis	...	...	...	...	...	
94. Diseases of the Lymphatic System—						
Lymphangitis ...	...	2	...	2	...	
Lymphadenitis, Bubo (non-specific) ...	4	179	...	183	18	
95. Hæmorrhage of undetermined cause ...	...	...	...	...	...	
96. Other affections of the Circulatory System ...	...	...	...	...	...	
V.—AFFECTIONS OF THE RESPIRATORY SYSTEM.						
97. Diseases of the Nasal Passage—						
Adenoids ...	...	...	...	...	...	
Polypus ...	...	...	...	...	...	
Rhinitis	...	1	...	1	...	
Coryza ...	2	77	...	79	6	
98. Affections of the Larynx—						
Laryngitis ...	...	1	...	1	...	
99. Bronchitis—						
(*a*) Acute ...	10	434	2	444	6	
(*b*) Chronic ...	...	...	...	...	...	
100. Broncho-Pneumonia ...	8	158	69	166	2	
101. Pneumonia—						
(*a*) Lobar ...	3	145	78	148	5	
(*b*) Unclassified ...	...	...	...	...	...	
102. Pleurisy, Empyema ...	1	30	3	31	...	
103. Congestion of the Lungs ...	...	...	...	...	...	
104. Gangrene of the Lungs	..	2	2	2	...	
105. Asthma	2	76	1	78	1	
106. Pulmonary Emphysema	...	1	...	1	...	
107. Other affections of the Lungs—	...	1	1	1	...	
Pulmonary Spirochætosis	...	...	...	...	...	
Carried forward ...	928	7,102	848	8,030	1,054	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	928	7,102	848	8,030	1,054	
VI.—DISEASES OF THE DIGESTIVE SYSTEM.						
108. A.—Diseases of Teeth or Gums—Hare lip	1	3	...	4	...	
Caries, Pyorrhœa, etc. ...	...	27	1	27	...	
B.—Other affections of the mouth—						
Stomatitis ...	...	9	...	9	...	
Glossitis, etc.	...	...	...	...	...	
109. Affections of the Pharynx or Tonsils—						
Tonsilitis ...	1	18	...	19	...	
Pharyngitis ...	...	23	...	23	...	
Vincents Angina ...	...	1	1	1	...	
110. Affections of the Oesophagus	...	...	...	...	...	
111. A.—Ulcer of the Stomach ...	2	2	1	4	...	
B.—Ulcer of the Duodenum ...	...	...	...	...	...	
112. Other affections of the Stomach—						
Gastritis	3	52	1	55	2	
Dyspepsia, etc. ...	...	23	...	23	2	
113. Diarrhœa and Enteritis—						
Under two years ...	...	...	...	...	...	
114. Diarrhœa and Enteritis—						
Two years and over ...	4	281	33	285	3	
Colitis	...	64	...	64	...	
Ulceration ...	...	...	...	...	...	
114A. Sprue	1	6	...	7	...	
115. Ankylostomiasis ...	22	505	10	527	34	
116. Diseases due to Intestinal Parasites—						
(*a*) Cestoda (Tænia)	...	...	...	...	...	
(*b*) Trematoda (Flukes)	...	...	...	...	...	
Carried forward ...	962	8,116	895	9,078	1,095	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	962	8,116	895	9,078	1,095	
DISEASES OF THE DIGESTIVE SYSTEM.—*Contd.*						
(*c*) Nematoda (other than Ankylostomo)—						
Ascaris ...	7	255	...	262	15	
Trichocephalus dispar ...	...	...	...	...	...	
Trichina ...	...	...	...	...	...	
Dracunculus ...	...	...	...	...	...	
Strongylus ...	...	...	...	...	...	
Oxyuris ...	...	...	...	...	...	
(*d*) Coccidia ...	...	...	...	...	...	
(*e*) Other parasites ...	...	...	...	...	...	
(*f*) Unclassified ...	...	61	...	61	8	
117. Appendicitis ...	1	16	...	17	...	
118. Hernia	2	49	...	51	...	
119. A.—Affections of the Anus, Fistula, etc.	2	67	...	69	3	
B.—Other affections of the Intestines—						
Enteroptosis ...	...	...	...	...	...	
Constipation and Colic ...	2	49	...	51	2	
120. Acute Yellow Atrophy of the Liver ...	...	...	...	...	...	
121. Hydatid of the Liver ...	...	...	...	...	...	
122. Cirrhosis of the Liver—						
(*a*) Alcoholic ...	...	...	...	...	...	
(*b*) Other forms ...	2	42	14	44	2	
123. Biliary Calculus ...	...	1	...	1	...	
124. Other affections of the Liver—						
Abscess	2	23	5	25	...	
Hepatitis	...	7	...	7	...	
Cholecystitis ...	...	...	...	...	...	
Jaundice	...	7	...	7	1	
125. Diseases of the Pancreas	...	...	...	...	...	
126. Peritonitis (of unknown cause)	..	11	11	11	...	
127. Other affections of the Digestive System ...	...	...	...	...	...	
Carried forward ...	980	8,704	925	9,684	1,126	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	980	8,704	925	9,684	1,126	
VII.—DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL).						
128. Acute Nephritis ...	...	70	33	70	3	
129. Chronic Nephritis ...	15	259	59	274	17	
130. A.—Chyluria ...	...	...	...	...	...	
B.—Schistosomiasis ...	...	...	...	...	...	
131. Other affections of the Kidneys—						
Pyelitis, etc. ...	...	12	1	12	...	
132. Urinary Calculus ...	1	1	...	2	...	
133. Diseases of the Bladder—						
Cystitis	...	8	1	8	1	
134. Diseases of the Urethra—						
(*a*) Stricture ...	1	23	...	24	...	
(*b*) Other ...	...	10	...	10	1	
135. Diseases of the Prostate—						
Hypertrophy ...	...	...	...	...	...	
Prostatitis ...	...	2	...	2	...	
136. Diseases (non-Venereal) of the Genital Organs of man— ...	...	...	...	...	...	
Epididymitis ...	2	16	...	18	...	
Orchitis	..	8	...	8	...	
Hydrocele ...	1	31	...	32	1	
Ulcer of Penis ...	...	2	...	2	...	
137. Cysts or other non-malignant Tumours of the Ovaries ...	...	2	1	2	...	
138. Salpingitis— Abscess of the Pelvis	...	2	...	2	...	
139. Uterine Tumours (non-Malignant) ...	...	...	...	...	..	
140. Uterine Hæmorrhage (non-puerperal) ...	...	...	...	...	...	
141. A.—Metritis ...	...	1	...	1	...	
B.—Other affections of Female Genital Organs—						
Displacements of Uterus ...	...	1	...	1	...	
Amenorrhœa ...	...	...	...	...	...	
Dysmenorrhœa	...	1	...	1	...	
Leucorrhœa ...	1	11	...	12	...	
Carried forward ...	1,001	9,164	1,020	1,065	1,149	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,001	9,164	1,020	10,165	1,149	
DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL).—*Contd.*						
142. Diseases of the Breast (non-puerperal)—						
Mastitis	...	...	...	...	...	
Abscess of Breast ...	...	...	...	...	...	
VIII.—PUERPERAL STATE.						
143. A.—Normal Labour ...	...	12	...	12	2	
B.—Accidents of Pregnancy—						
(*a*) Abortion ...	...	6	...	6	...	
(*b*) Ectopic Gestation ...	...	2	2	2	...	
(*c*) Other accidents of pregnancy ...	...	4	...	4	...	
144. Puerperal Hæmorrhage	...	...	...	...	...	
145. Other accidents of parturition	1	1	...	2	...	
146. Puerperal Septicæmia	...	...	..	...	...	
147. Phlegmasia Dolens ...	...	...	...	...	...	
148. Puerperal Eclampsia ...	...	1	1	1	...	
149. Sequelas of Labour ...	...	...	...	...	...	
150. Puerperal affections of the Breast ...	...	...	...	...	...	
IX.—AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.						
151. Gangrene	1	5	4	6	...	
152. Boil—Carbuncle ...	...	20	...	20	...	
153. Abscess	2	179	1	181	9	
Cellulitis	5	98	2	103	1	
Whitlow	...	...	...	...	...	
154. A.—Tinea	...	38	...	38	...	
B.—Scabies ...	4	225	...	229	1	
Carried forward ...	1,014	9,755	1,030	10,769	1,162	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PENANG HOSPITALS—*Contd.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,014	9,755	1,030	10,769	1,162	
AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.—*Cntd.*						
155. Other diseases of the Skin—						
Erythema ...	...	13	...	13	...	
Urticaria	...	2	...	2	1	
Eczema	2	40	...	42	1	
Herpes	1	2	...	3	...	
Psoriasis	1	1	...	2	...	
Elephantiasis ...	...	8	1	8	1	
Myiasis	...	...	...	...	...	
Chigoes	...	...	...	...	...	
Cutaneous Leishmaniasis ...	...	...	...	...	...	
Ulcers	61	637	...	698	63	
X.—DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS).						
156. Diseases of Bones—						
Osteitis	...	10	...	10	3	
157. Diseases of Joints—						
Arthritis	4	201	. .	205	13	
Synovitis	...	15	...	15	...	
158. Other Diseases of Bones or Organs of Locomotion	...	40	...	40	...	
XI.—MALFORMATIONS.						
159. Malformations—						
Hydrocephalus ...	...	...	...	...	...	
Hypospadias ...	...	...	...	...	...	
Spina Bifida, etc. ...	...	...	...	...	...	
XII.—DISEASES OF INFANCY.						
160. Congenital Debility ...	...	...	...	...	...	
161. Premature Birth ...	...	...	...	...	...	
162. Other affections of Infancy	...	...	...	...	...	
163. Infant Neglect (infants of three months or over)	...	...	...	...	...	
Carried forward ...	1,083	10,724	1,031	11,807	1,244	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT THE PENANG HOSPITALS—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,083	10,724	1,031	11,807	1,244	
XIII.—AFFECTIONS OF OLD AGE.						
164. Senility	14	100	20	114	5	
XIV.—AFFECTIONS PRODUCED BY EXTERNAL CAUSES.						
165. Suicide by Poisoning	...	16	14	16	1	
166. Corrosive Poisoning (intentional) ...	...	4	1	4	1	
167. Suicide by Gas Poisoning	...	...	...	...	...	
168. Suicide by Hanging or Strangulation ...	...	...	...	...	...	
169. Suicide by Drowning ...	...	...	...	...	...	
170. Suicide by Firearms ...	...	...	...	...	...	
171. Suicide by cutting or stabbing Instruments	...	...	...	...	...	
172. Suicide by jumping from a height ...	...	...	...	...	...	
173. Suicide by crushing ...	...	...	...	...	...	
174. Other Suicides ...	...	...	...	...	...	
175. Food Poisoning—Botulism	...	...	...	...	...	
176. Attacks of poisonous animals—						
Snake Bite ...	...	...	...	...	...	
Insect Bite ...	...	...	...	...	...	
177. Other accidental Poisonings	...	...	...	...	...	
178. Burns (by Fire) ...	3	37	...	40	2	
179. Burns (other than by Fire)	...	...	...	...	...	
180. Suffocation (accidental)	...	...	...	...	...	
181. Poisoning by Gas (accidental)	...	...	...	...	...	
182. Drowning (accidental)	...	...	...	...	...	
183. Wounds (by Firearms, war excepted) ...	...	...	...	...	...	
184. Wounds (by cutting or stabbing Instruments)	...	...	...	...	...	
185. Wounds (by fall) ...	...	...	...	...	...	
186. Wounds (in Mines or Quarries) ...	...	...	...	...	...	
Carried forward ...	1,100	10,881	1,066	11,981	1,253	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT THE PENANG HOSPITALS—*Continued.*

DISEASES	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,100	10,881	1,066	11,981	1,253	
AFFECTIONS PRODUCED BY EXTERNAL CAUSES.—*Cntd.*						
187. Wounds (by Machinery)	...	...	...	...	...	
188. Wounds (crushing, *e.g.*, railway accidents, etc. ...	...	...	...	...	...	
189. Injuries inflicted by Animals, Bites, Kicks, etc.	...	8	...	8	...	
190. Wounds inflicted on Active Service ...	...	...	...	...	...	
191. Executions of civilians by belligerents ...	...	...	...	...	...	
192. A.—Over fatigue ...	...	...	...	...	...	
B.—Hunger or Thirst	...	...	...	...	...	
193. Exposure to Cold, Frost bite, etc. ...	...	...	...	...	...	
194. Exposure to Heat—						
Heatstroke ...	...	...	...	...	...	
Sunstroke ...	...	...	...	...	...	
195. Lightning Stroke ...	...	...	...	...	...	
196. Electric Shock ...	...	...	...	...	...	
197. Murder by Firearms ...	...	...	...	...	...	
198. Murder by cutting or stabbing Instruments	...	...	...	...	...	
199. Murder by other means	...	...	...	...	...	
200. Infanticide (Murder of an infant under one year)	3	1	...	4	...	
201. A.—Dislocation ...	...	...	...	...	...	
B.—Sprain ...	...	...	...	...	...	
C.—Fracture ...	6	53	7	59	6	
202. Other external Injuries	11	888	10	899	17	
203. Deaths by Violence of unknown cause ...	...	...	...	...	...	
XV.—ILL-DEFINED DISEASES.						
204. Sudden Death (Causes unknown) ...	...	...	...	...	...	
Carried forward ...	1,120	11,831	1,083	12,951	1,276	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT THE PENANG HOSPITALS—*Concluded.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	1,120	11,831	1,083	12,951	1,276	
ILL—DEFINED DISEASES.—*Contd.*						
205. Diseases not already specified or ill-defined—						
Ascites	...	...	...	...	...	
Oedema	...	...	...	...	...	
Asthenia, marasmus	6	25	7	31	...	
Shock	...	...	...	...	...	
Hyperpyrexia ...	...	...	...	...	...	
B.—Malingering ...	2	276	...	278	9	
Contacts ...	...	23	...	23	...	
XVI.—Diseases, the total of which have not caused 10 deaths ...	13	254	2	267	14	
Total ...	1,141	12,409	1,092	13,550	1,299	

(iii)—PROVINCE WELLESLEY HOSPITALS.

DISEASES.	Remaining in Hospital at end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at end of 1925.	REMARKS.
		Admissions.	Deaths.			
I.—EPIDEMIC, AND INFECTIOUS DISEASES.						
1. Enteric Group—						
(*a*) Typhoid Fever ...	..	1	...	1	...	
(*b*) Paratyphoid A. ...	...	...	...	...	...	
(*c*) Paratyphoid B. ...	...	...	...	...	...	
(*d*) Type not defined	...	...	...	...	...	
2. Typhus	...	...	...	...	...	
3. Relapsing Fever ...	...	...	...	...	...	
4. Undulant Fever ...	...	...	...	...	...	
5. Malaria—						
(*a*) Tertian ...	8	393	...	401	12	
(*b*) Quartan ...	1	7	...	8	...	
(*c*) Aestivo-autumnal	7	378	45	385	5	
(*e*) Blackwater ...	...	...	...	...	...	
(*f*) Type unclassified	1	223	4	224	5	
6. Small-pox—						
Alastrim	...	...	...	...	...	
7. Measles	...	4	...	4	...	
8. Scarlet Fever ...	...	...	...	...	...	
9. Whooping Cough ...	...	...	...	...	...	
10. Diphtheria ...	...	...	...	...	...	
11. Influenza	...	22	1	22	...	
12. Miliary Fever ...	...	...	...	...	...	
13. Mumps	...	...	...	...	...	
14. Cholera	...	...	...	...	...	
15. Epidemic diarrhœa ...	...	...	..	...	...	
16. Dysentery—						
(*a*) Amœbic ...	4	107	30	111	5	
(*b*) Bacillary ...	1	40	14	41	2	
(*c*) Undefined or due to other causes ...	...	4	1	4	...	
17. Plague—						
(*a*) Bubonic ...	...	...	...	...	...	
(*b*) Pneumonic ...	...	...	...	...	...	
(*c*) Septicæmic ...	...	...	...	...	...	
(*d*) Undefined ...	...	...	...	...	...	
18. Yellow Fever ...	...	...	...	...	...	
19. Spirochætosis icterohæmorrhagica ...	..	...	...	...	...	
20. Leprosy	1	16	...	17	...	
21. Erysipelas	...	2	1	2	...	
22. Acute Poliomyelitis ...	...	...	...	...	...	
23. Encephalitis Lethargica	...	...	...	...	...	
24. Epidemic Cerebro-spinal Fever ...	1	1	1	2	...	
Carried forward ...	24	1,174	97	1,284	29	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at end of 1924.	YEARLY TOTAL.		Total Cases Treated	Remaining in Hospital at end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ..	24	1,198	97	1,222	29	
EPIDEMIC AND INFECTIOUS DISEASES.—*Contd.*						
25. Other Epidemic Diseases—						
(*a*) Rubeola (German Measles) ...	...	...	...	...	...	
(*b*) Varicella (Chicken-pox) ...	1	46	...	47	...	
(*c*) Kala-azar ...	...	...	...	...	...	
(*d*) Phlebotomus Fever	...	...	...	...	...	
(*e*) Dengue ...	...	...	...	...	...	
(*f*) Epidemic Dropsy	...	...	...	...	...	
(*g*) Yaws ...	1	27	...	28	...	
(*h*) Trypanosomiasis	...	...	...	...	...	
26. Glanders	...	...	...	...	...	
27. Anthrax	...	...	...	...	...	
28. Rabies	...	...	...	...	...	
29. Tetanus	...	6	5	6	...	
30. Mycosis	...	...	...	...	...	
31. Tuberculosis, Pulmonary and Laryngeal ...	5	116	60	121	3	
32. Tuberculosis of the Meninges or Central Nervous System ...	...	...	...	...	...	
33. Tuberculosis of the Intestines or Peritoneum	...	...	...	...	...	
34. Tuberculosis of the Vertbral Column ...	...	...	...	...	...	
35. Tuberculosis of Bones and Joints ...	1	8	...	9	1	
36. Tuberculosis of Other Organs—						
(*a*) Skin or Subcutaneous Tissue (Lupus)	...	...	...	...	...	
(*b*) Bones ...	...	...	...	...	...	
(*c*) Lymphatic System	...	...	..	...	...	
(*d*) Genito-urinary ...	...	...	...	...	...	
(*e*) Other Organs ...	...	...	...	...	...	
37. Tuberculosis disseminated—						
(*a*) Acute ...	...	...	...	...	...	
(*b*) Chronic ...	..	...	...	...	...	
Carried forward ...	32	1,401	162	1,433	33	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	32	1,401	162	1,433	33	
EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.—*Cont.*						
38. Syphilis—						
(*a*) Primary ...	1	123	...	124	3	
(*b*) Secondary ...	1	99	...	100	4	
(*c*) Tertiary ...	12	213	1	225	7	
(*d*) Hereditary ...	...	1	...	1	...	
(*e*) Period not indicated	1	24	...	25	1	
39. Soft Chancre ...	7	90	...	97	6	
40. A.—Gonorrhœa and its complications ...	2	102	1	104	5	
B.—Gonorrhœal Ophthalmia ...	...	2	...	2	...	
C.—Gonorrhœal Arthritis	...	22	...	22	2	
D.—Granuloma Venereum ...	...	1	...	1	...	
41. Septicæmia ...	...	13	13	13	...	
42. Other Infectious Diseases—	...	...	...	...	...	
Trypanosomiasis ...	...	...	...	...	...	
II.—GENERAL DISEASES NOT MENTIONED ABOVE.						
43. Cancer or other malignant Tumours of the Buccal Cavity ...	...	2	1	2	...	
44. Cancer or other malignant Tumours of the stomach or Liver ...	...	5	2	5	...	
45. Cancer or other malig- Tumours of the Peri- Rectum	...	...	...	...	...	
46. Cancer or other malignant Tumours of the Female Genital Or- toneum, Intestines, gans	...	1	...	1	...	
47. Cancer or other malignant Tumours of the Breast	...	...	...	...	...	
Carried forward ...	56	2,099	180	2,155	61	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	56	2,099	180	2,155	61	
EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.—*Cont.*						
48. Cancer or other malignant Tumours of the Skin	...	...	...	...	...	
49. Cancer or other malignant Tumours of Organs not specified ...	...	4	2	4	...	
50. Tumours non-malignant	2	6	...	8	...	
51. Acute Rheumatism ...	...	...				
52. Chronic Rheumatism ...	...	...	...	...	...	
53. Scurvy (including Barlow's Diseases) ...	...	...	...	...	...	
54. Pellagra	...	...	...	...	...	
55. Beri-beri	...	3	1	3	...	
56. Rickets	...	...	...	...	...	
57. Diabetes (not including Insipidus	...	...	...	...	...	
58. Anæmia—						
(*a*) Pernicious ...	...	...	...	...	...	
(*b*) Other Anæmias and Chlorosis ...	2	18	2	20	...	
59. Diseases of the Pituitary Body ...	...	...	...	...	...	
60. Diseases of the Thyroid Gland—						
(*a*) Exopthalmic Goitre ...	...	...	...	...	...	
(*b*) Other diseases of the Thyroid Gland, Myxœdema	...	...	...	...	...	
61. Diseases of the Parathyroid Glands ...	...	...	...	...	...	
62. Diseases of the Thymus	...	...	...	...	...	
63. Diseases of the Suprarenal Glands ...	...	...	...	...	...	
64. Diseases of the Spleen	...	5	...	5	...	
65. Leukæmia—						
(*a*) Leukæmia ...	...	...	...	...	...	
(*b*) Hodgkin's Disease	...	...	...	...	...	
Carried forward ...	60	2,135	185	2,195	61	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	60	2,135	185	2,195	61	
GENERAL DISEASES NOT MENTIONED ABOVE.—*Cond.*						
66. Alcholism	...	2	...	2		
67. Chronic poisoning by mineral substances (lead, mercury, etc.)	...	...	...	...	...	
68. Chronic poisoning by organic substances (Morphia, Cocaine, etc.)	...	2	...	2	...	
69. Other General Disease						
Auto-intoxication ...	...	...	...	...	...	
Purpura Hæmorrhagica	...	...	...	...	...	
Hæmophilia ...	...	...	...	...	...	
Dibetes Insipidus ...	...	...	...	...	...	
III.—AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.						
70. Encephalitis (not including Encephalitis Lethargica)	...	...	...	...	...	
71. Meningitis (not including Tuberculous Meningitis or Cerebrospinal Meningitis)	.	...	...	...	...	
72. Locomotor Ataxia ...	...	...	...	...	...	
73. Other Affections of the Spinal Cord ...	. .	...	...	...	...	
74. Apoplexy—						
(*a*) Hæmorrhage ...	...	3	2	3	1	
(*b*) Embolism ...	...	...	...	...	...	
(*c*) Thrombosis ...	...	...	...	...	...	
75. Paralysis—						
(*a*) Hemiplegia ...	5	11	1	16	...	
(*b*) Other Paralyses	2	5	2	7	...	
76. General Paralysis of the Insane	...	...	...	...	...	
77. Other forms of Mental Alienation ...	1	19	...	20	...	
78. Epilepsy	...	1	...	1	...	
Carried forward ...	68	2,178	190	2,246	62	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	68	2,178	190	2,246	62	
AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.—*Continued.*						
79. Eclampsia, Convulsions (non-puerperal) 5 years or over ...	...	...	...	...	...	
80. Infantile Convulsions						
81. Chorea	...	...	...	...	...	
82. A.—Hysteria ...	...	...	...	...	...	
B.—Neuritis ...	1	2	...	3	...	
83. Cerebral Softening ...	...	...	...	...	...	
84. Other affections of the Nervous System such as Paralysis Agitans	...	9	2	9	1	
85. Affections of the Organs of Vision—						
(*a*) Diseases of the Eye	...	...	...	...	...	
(*b*) Conjunctivitis ...	1	20	...	21	...	
(*c*) Trachoma ...	...	...	...	...	...	
(*d*) Tumours of the Eye	...	...	...	...	...	
(*e*) Other affections of the Eye ...	1	6	...	7	1	
86. Affections of the Ear or Mastoid Sinus ...	...	3	...	3	...	
IV.—AFFECTIONS OF THE CIRCULATORY SYSTEM.						
87. Pericarditis ...	...	...	...	...	...	
88. Acute Endocarditis or Myocarditis ...	1	3	1	4	...	
89. Angina Pectoris ...	...	...	...	...	...	
90. Other Diseases of the Heart—	...	...	...	...	...	
(*a*) Valvular—						
Mitral ...	...	7	4	7	1	
Aortic ...	1	...	...	1	...	
Tricuspid ...	...	...	...	...	...	
Pulmonary ...	...	...	...	...	...	
(*b*) Myocarditis ...	...	8	8	8	...	
Carried forward ...	73	2,236	205	2,309	65	

Return of Diseases and Deaths (In-patients) in 1925, at Province Wellesley Hospitals—*Continued.*

Diseases.	Remaining in Hospital at end of 1924.	Yearly Total.		Total cases Treated.	Remaining in Hospital at end of 1925.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	73	2,236	205	2,309	65	
Affections of the Circulatory System—*Continued.*						
91. Diseases of the Arteries—						
(*a*) Aneurism ...	...	...	...	...	...	
(*b*) Arterio-Sclerosis	...	...	...	...	...	
(*c*) Other Diseases ...	...	...	...	...	...	
92. Embolism or Thrombosis (non-cerebral) ...	...	...	...	...	...	
93. Diseases of the Veins—						
Hæmorrhoids ...	...	...	...	...	...	
Varicose Veins ...	...	...	...	...	...	
Phlebitis ...	...	1	...	1	...	
94. Diseases of the Lymphatic System—						
Lymphangitis ...	...	...	...	...	...	
Lymphadenitis, Bubo (non-specific) ...	1	52	...	53	1	
95. Hæmorrhage of undetermined cause ...	...	...	...	...	...	
96. Other affections of the Circulatory System ...	...	...	...	...	...	
V.—Affections of the Respiratory System.						
97. Diseases of the Nasal Passage—						
Adenoids	...	...	...	...	...	
Polypus	...	...	...	...	...	
Rhinitis	1	1	...	2	...	
Coryza	...	...	...	...	...	
98. Affections of the Larynx—						
Laryngitis ...	...	1	...	1	...	
99. Bronchitis—						
(*a*) Acute ...	5	148	1	153	3	
(*b*) Chronic ...	...	...	...	...	...	
100. Broncho-Pneumonia ...	1	60	20	61	1	
101. Pneumonia—						
(*a*) Lobar ...	3	54	14	57	4	
(*b*) Unclassified ...	...	...	...	...	...	
102. Pleurisy, Empyema ...	...	17	...	17	1	
103. Congestion of the Lungs	...	...	...	...	...	
Carried forward ...	84	2,570	240	2,654	75	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	84	2,570	240	2,654	75	
AFFECTIONS OF THE RESPIRATORY SYSTEM.—*Contd.*						
104. Gangrene of the Lungs	...	2	1	2	...	
105. Asthma	4	80	1	84	1	
106. Pulmonary Emphysema	...	...	...	...	...	
107. Other affections of the Lungs—						
Pulmonary Spirochætosis ...	...	...		...	...	
VI.—DISEASES OF THE DIGESTIVE SYSTEM.						
108. A.—Diseases of Teeth or Gums—						
Caries, Pyorrhœa, etc. ...	...	3	...	3	...	
B.—Other affections of the mouth—						
Stomatitis ...	...	3	...	3	...	
Glossitis, etc.						
109. Affections of the Pharynx or Tonsils—						
Tonsilitis ...	...	...	...	...	...	
Pharyngitis ...	...	3	...	3	...	
110. Affections of the Oesophagus	...	...	...	...	...	
111. A.—Ulcer of the Stomach ...	...	1	...	1	...	
B.—Ulcer of the Duodenum ...	...	...	...	...	...	
112. Other affections of the Stomach—						
Gastritis	...	60	...	60	2	
Dyspepsia, etc. ...	...	...	...	...	...	
113. Diarrhœa and Enteritis—						
Under two years ...	...	...	...	...	...	
114. Diarrhœa and enteritis—						
Two years and over ...	...	55	6	55	3	
Colitis	4	21	3	25	2	
Ulceration ...	...	...	...	...	...	
114 A. Sprue	...	...	...	...	...	
115. Ankylostomiasis ...	25	689	61	714	35	
Carried forward ..	117	3,487	312	3,604	118	

Return of Diseases and Deaths (In-patients) in 1925, at Province Wellesley Hospitals—*Continued.*

Diseases.	Remaining in Hospital at the end of 1924.	Yearly Total.		Total cases Treated.	Remaining in Hospital at the end of 1925.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	117	3,487	312	3,604	118	
Diseases of the Digestive System.—*Contd.*						
116. Diseases due to Intestinal Parasites—						
(*a*) Cestoda (Tænia)	...	...	...	...	...	
(*b*) Trematoda (Flukes)	...	...	...	...	...	
(*c*) Nematoda (other than Ankylostoma)—						
Ascaris ...	10	255	...	265	7	
Trichocephalus dispar ...	...	...	...	...	...	
Trichina ...	...	...	...	...	...	
Dracunculus ...	...	...	...	...	...	
Strongylus ...	...	...	...	...	...	
Oxyuris ...	...	14	...	14	...	
(*d*) Coccidia ...	...	...	...	...	...	
(*e*) Other parasites ...	...	...	...	...	...	
(*f*) Unclassified ...	...	...	...	...	...	
117. Appendicitis ...	...	1	1	1	...	
118. Hernia	...	12	1	12	...	
119. A.—Affections of the Anus, Fistula, etc.	...	3	...	3	...	
B.—Other affections of the Intestines—						
Constipation ...	...	14	...	14	1	
120. Acute Yellow trophy of the Liver ...	...	...	...	...	...	
121. Hydatid of the Liver ...	...	...	...	...	...	
122. Cirrhosis of the Liver—						
(*a*) Alcoholic ...	...	...	...	...	...	
(*b*) Other forms ...	...	26	6	26	4	
123. Biliary Calculus ...	...	...	...	...	...	
124. Other affections of the Liver—						
Abscess	...	4	...	4	...	
Hepatitis ...	...	...	...	...	...	
Cholecytitis ...	...	...	...	...	...	
Jaundice	...	1	...	1	...	
125. Diseases of the Pancreas	...	...	...	...	...	
126. Peritonitis (of unknown cause)	1	8	6	9	...	
127. Other affections of the Digestive System ...	...	2	...	2	...	
Carried forward ...	128	3,827	326	3,955	130	

Return of Diseases and Deaths (In-patients) in 1925, at Province Wellesley Hospitals—*Continued.*

Diseases.	Remaining in Hospital at the end of 1924.	Yearly Total.		Total cases Treated.	Remaining in Hospital at the end of 1925.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	128	3,827	326	3,955	130	
VII.—Diseases of the Genito-urinary System (Non-Venereal).						
128. Acute Nephritis ...	...	33	5	33	...	
129. Chronic Nephritis ...	4	23	11	27	1	
130. A.—Chyluria ...	...	...	...	...	...	
B.—Schistosomiasis ...	...	...	...	...	...	
131. Other affections of the Kidneys—						
Pyelitis, etc. ...	...	...	...	...	...	
132. Urinary Calculus ...	...	1	...	1	...	
133. Diseases of the Bladder—						
Cystitis	...	...	...	...	...	
134. Diseases of the Urethra—						
(*a*) Stricture ...	...	9	...	9	...	
(*b*) Other ...	...	14	...	14	1	
135. Diseases of the Prostate—						
Hypertrophy ...	...	...	...	...	...	
Prostatitis ...	...	...	...	...	...	
136. Diseases (non-Venereal) of the Genital Organs of man—						
Epididymitis ...	...	...	...	...	...	
Orchitis	1	11	...	12	2	
Hydrocele ...	1	6	...	7	1	
Ulcer of Penis ...	...	...	...	...	...	
137. Cysts or other non-malignant Tumours of the Ovaries ...	...	...	...	...	...	
138. Salpingitis—Abscess of the Pelvis	...	2	...	2	...	
139. Uterine Tumours (non-Malignant) ...	...	...	...	...	...	
140. Uterine Hæmorrhage (non-puerperal) ...	...	...	...	...	...	
141. A.—Metritis ...	...	...	...	...	...	
B.—Other affections of Female Genital Organs—						
Displacements of Uterus ...	...	1	...	1	...	
Amenorrhœa ...	...	4	...	4	...	
Dysmenorrhœa	...	...	...	...	...	
Leucorrhœa ...	1	2	...	3	...	
Carried forward ...	135	3,933	342	4,068	135	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	135	3,933	342	4,068	135	
DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL).—*Contd.*						
142. Diseases of the Breast (non-puerperal)—						
Mastitis	...	1	...	1	...	
Abscess of Breast ...	...	...	...	...	...	
VIII.—PUERPERAL STATE.						
143. A.—Normal Labour ...	...	15	...	15	..	
B.—Accidents of Pregnancy—						
(*a*) Abortion ...	...	3	...	3	1	
(*b*) Ectopic Gestation ...	...	...	...	...	...	
(*c*) Other accidents of pregnancy ...	...	...	...	...	...	
144. Puerperal Hæmorrhage	...	...	...	...	...	
145. Other accidents of parturition	...	...	...	...	...	
146. Puerperal Septicæmia	...	1	1	1		
174. Phlegmasia Dolens ...	...	...	...	...	...	
148. Puerperal Eclampsia ...	...	...	...	...	...	
149. Sequelas of Labour ...	...	...	...	...	...	
150. Puerperal affections of the Breast ...	...	...	...	...	...	
IX.—AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.						
151. Gangrene	...	...	...	..	...	
152. Boil—Carbuncle ...	1	10	...	11	...	
153. Abscess—	1	82	...	83	4	
Cellulitis	2	35	...	37	...	
Whitlow	...	5	...	5	...	
154. A.—Tinea	...	5	...	5	...	
B.—Scabies ...	1	61	...	62	1	
Carried forward ...	140	4,151	343	4,291	141	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL. Admissions.	YEARLY TOTAL. Deaths.	Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
Brought forward ...	140	4,151	343	4,291	141	
AFFECTIONS OF THE SKIN AND CELLUTAR TISSUES—*Cont.*						
155. Other diseases of the Skin—	...	3	...	3	2	
Erythema ...	...	...	...	...	...	
Urticaria	...	...	...	...	...	
Eczema	...	...	...	...	...	
Herpes	1	20	...	21	2	
Psoriasis	...	...	...	...	...	
Elephantiasis ...	...	...	...	...	...	
Myiasis	...	...	...	...	...	
Chigœs	...	...	...	...	...	
Cutaneous Leishmaniasis ...	...	...	...	...	...	
Ulcers	25	387	1	412	28	
X.—DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS).						
156. Diseases of Bones—						
Osteitis	1	2	...	3	...	
157. Diseases of Joints—						
Arthritis	2	20	...	22	...	
Synovitis ...	...	3	...	3	...	
158. Other Diseases of Bones or Organs of Locomotion ...	...	40	...	40	2	
XI.—MALFORMATIONS.						
159. Malformations ...	...	...	...	...	...	
Hydrocephalus ...	...	...	...	...	...	
Hypospadias ...	...	...	...	...	...	
Spina Bifida, etc. ...	...	1	...	1	...	
XII.—DISEASES OF INFANCY.						
160. Congenital Debility ...	...	...	...	...	...	
161. Premature Birth ...	...	...	...	...	...	
162. Other affections of Infancy	...	...	...	...	...	
163. Infancy Neglect (infants of three months or over)	...	...	...	...	...	
Carried forward ...	169	4,627	344	4,796	175	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS
		Admissions.	Deaths.			
Broughi forward ...	169	4,627	344	4,796	175	
XIII.—AFFECTIONS OF OLD AGE.						
164. Senility	...	24	22	24	...	
Senile Dementia ...	...	...	...	...	...	
XIV.—AFFECTIONS PRODUCED BY EXTERNAL CAUSES.						
165. Suicide by Poisoning ...	..	..	...	...	...	
166. Corrosive Poisoning (intentional) ...	...	...	...	...	...	
167. Suicide by Gas Poisoning	...	...	...	...	...	
168. Suicide by Hanging or Strangulation ...	...	...	...	...	...	
169. Suicide by Drowning ...	...	...	...	...	...	
170. Suicide by Firearms ...	...	...	..	...	...	
171. Suicide by cutting or stabbing Instruments	...	...	...	...	...	
172. Suicide by jumping from a height	...	...	...	...	...	
173. Suicide by crushing ...	...	...	...	...	...	
174. Other Suicides ...	...	...	..	...	...	
175. Food Poisoning—Botulism	...	...	...	...	...	
176. Attacks of poisonous animals—						
Snake Bite ...	...	...	...	...	...	
Insect Bite ...	...	...	...	...	...	
177. Other accidental Poisonings	...	...	...	...	...	
178. Burns (by Fire) ...	...	15	1	15	2	
179. Burns (other than by Fire)	...	...	...	...	...	
180. Suffocation (accidental)	...	...	...	...	...	
181. Poisoning by Gas (accidental)	...	...	...	...	...	
182. Drowning (accidental)	...	...	...	...	...	
183. Wounds (by Firearms, war excepted) ...	...	...	...	...	...	
184. Wounds (by cutting or stabbing Instruments)	...	...	...	...	...	
185. Wounds (by fall) ...	...	...	...	...	...	
186. Wounds (in Mines or Quarries)	...	...	...	...	...	
Carried forward ...	169	4,666	367	4,835	177	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	169	4,666	367	4,835	177	
AFFECTIONS PRODUCED BY EXTERNAL CAUSES.—*Contd.*						
187. Wounds (by Machinery)	...	...	...	...	...	
188. Wounds (crushing, *e.g.*, railway accidents etc.)	...	...	...	...	...	
189. Injuries inflicted by Animals, Bites, Kicks, etc.	...	12		12	...	
190. Wounds inflicted on Active Service ...	...	...	...	...	...	
191. Executions of civilians by belligerents ...	...	...	...	...	...	
192. A.—Over fatigue ...	...	...	...	...	...	
B.—Hunger or Thirst	...	...	...	...	...	
193. Exposure to Cold, Frost bite, etc. ...	...	...	...	...	...	
194. Exposure to Heat—Heatstroke ...	...	...	...	...	...	
Sunstroke ...	...	...	...	...	...	
195. Lightning Stroke ...	...	...	...	...	...	
196. Electric Shock ...	...	...	...	...	...	
197. Murder by Firearms ...	...	...	...	...	...	
198. Murder by cutting or stabbing Instruments	...	...	...	...	...	
199. Murder by other means	...	...	...	...	...	
200. Infanticide (Murder of an infant under one year)	...	...	...	...	...	
201. A.—Dislocation ...	...	5	...	5	I	
B.—Sprain ...	...	...	...	...	...	
C.—Fracture ...	...	29	I	29	I	
202. Other external Injuries	14	394	I	408	14	
203. Deaths by Violence of unknown cause ...	...	7	6	7	...	
XV.—ILL-DEFINED DISEASES.						
204. Sudden Death (Causes unknown) ...	...	...	...	...	...	
Carried forward ...	183	5,113	375	5,296	193	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT PROVINCE WELLESLEY HOSPITALS—*Concluded.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	183	5,113	375	5,296	193	
ILL-DEFINED DISEASES.—*Contd.*						
205. A.—Diseases not already specified or ill-defined—						
Ascites ...	...	...	...	...	...	
Oedema ...	...	...	...	...	...	
Asthenia ...	...	...	...	...	...	
Shock ...	...	...	...	...	...	
Pyrexia of uncertain origin	...	142	...	142	2	
Hyperpyrexia	...	...	...	...	...	
B.—Malingering ...	3	37	...	40	1	
XVI.—Diseases, the total of which have not caused 10 deaths	4	182	...	186	4	
Total ...	190	5,474	375	5,664	200	

(iv)—MALACCA HOSPITALS.

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.						
1.—(*a*) Typhoid Fever ...	...	6	2	6	...	
5. Malaria—						
(*a*) Tertian ...	...	...	...	...	...	
(*b*) Quartan ...	...	27	...	27	...	
(*c*) Aestivo-autumnal	26	898	45	924	26	
(*d*) Cachexia ...	8	172	19	180	4	
7. Measles	...	3	...	3	...	
9. Whooping Cough ...	...	1	...	1	...	
10. Diphtheria ...	...	7	1	7	...	
11. Influenza	2	185	...	187	2	
13. Mumps	...	3	...	3	...	
16. Dysentery—						
(*a*) Amœbic ...	10	114	23	124	8	
(*b*) Bacillary ...	...	7	5	7	...	
(*c*) Undefined ...	...	1	...	1	...	
20. Leprosy	3	17	...	20	1	
21. Erysipelas	1	...	1	1	...	
25.—(*b*) Chicken-pox ...	...	7	...	7	...	
(*g*) Yaws ...	1	10	...	11	...	
29. Tetanus	...	2	2	2	...	
31. Tuberculosis, Pulmonary and Laryngeal ...	19	246	95	265	20	
38. Syphilis—						
(*a*) Primary ...	4	83	...	87	7	
(*b*) Secondary ...	18	134	...	152	10	
(*c*) Tertiary ...	7	64	7	71	10	
(*d*) Hereditary ...	1	3	1	4	1	
39. Soft Chancre ...	3	31	...	34	1	
40. A.—Gonorrhœa and its complications ...	4	78	...	82	2	
C.—Gonorrhœa Arthritis	1	10	...	11	1	
41. Septicæmia ...	...	1	...	1	...	
42. Other Infectious Diseases	...	4	4	4	...	
II.—GENERAL DISEASES NOT MENTIONED ABOVE.						
44. Cancer or other malignant Tumours of the stomach or Liver ...	1	9	6	10	...	
Carried forward ...	109	2,123	211	2,232	93	

RETURN OF DISEASES AND DEATHS IN 1925, AT MALACCA HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions	Deaths.			
Brought forward ...	109	2,123	211	2,232	93	
GENERAL DISEASES NOT MENTIONED ABOVE.—*Contd.*						
45. Cancer or other malignant Tumours of the Intestines ..	...	2	2	2	...	
46. Cancer or other malignant Tumours of the Female Genital Organs	...	I	I	I	...	
48. Cancer or other malignant Tumours of the Skin	...	2	...	2	...	
49. Cancer or other malignant Tumours of Organs not specified ...	...	2	...	2	...	
50. Tumours non-malignant	...	II	...	II	I	
51. Acute Rheumatism ...	...	2	...	2	...	
55. Beri-beri	40	164	21	204	34	
56. Rickets	...	I	I	I	...	
57. Diabetes	...	6	I	6	...	
64. Diseases of the Spleen	...	5	...	5	...	
65.—(*b*) Hodgkin's Disease	...	I	I	I	...	
66. Alcoholism ...	...	9	...	9	I	
67. Chronic poisoning by mineral substances ...	...	3	I	3	...	
68. Chronic poisoning by organic substances ...	...	582	...	582	6	
III.—AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.						
70. Encephalitis ...	...	2	2	2	...	
72. Locomotor Ataxia ...	I	6	...	7	...	
74.—(*a*) Hæmorrhage ...	...	I	I	I	...	
75.—(*a*) Hemiplegia ...	3	6	I	9	4	
(*b*) Other Paralysis ...	5	6	I	II	3	
77. Other forms of Mental Alienation. ...	I	62	...	63	I	
78. Epilepsy	2	II	...	13	4	
80. Infantile Convulsions	...	6	2	6	...	
81. Chorea	I	I	...	2	I	
82. B.—Neuritis ...	...	8	...	8	...	
Carried forward ...	162	3,023	246	3,185	148	

RETURN OF DISEASES AND DEATHS IN 1925, AT MALACCA HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions	Deaths.			
Brought forward ...	162	3,023	246	3,185	148	
AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.—*Contd.*						
84. Other affections of the Nervous System ...	1	32	3	33	1	
85.—(*b*) Conjuntivitis ...	...	18	...	18	4	
(*c*) Other affections of the Eye ...	7	26	...	33	8	
86. Affections of the Ear or Mastoid Sinus ...	...	13	...	13	2	
IV.—AFFECTIONS OF THE CIRCULATORY SYSTEM.						
87. Pericarditis ...	...	1	1	1	...	
90.—(*a*) Valvular Disease Heart, Mitral ...	1	24	9	25	3	
(*b*) Myocarditis ...	...	2	...	2	1	
91.—(*a*) Aneurism ...	...	1	...	1	...	
(*b*) Arterio-Sclerosis	3	19	7	22	3	
92. Embolism	...	1	1	1	...	
93. Hæmorrhoids ...	...	16	...	16	1	
Varicose Veins ...	...	1	...	1	...	
94. Lymphadenitis, Bubo	3	35	...	38	2	
96. Other affections of the Circulatory System ...	...	8	5	8	1	
V.—AFFECTIONS OF THE RESPIRATORY SYSTEM.						
97. Polypus	...	2	...	2	...	
98. Laryngitis ...	...	2	...	2	...	
99. Bronchitis ...	2	71	...	73	3	
100. Broncho-Pneumonia ...	...	50	20	50	2	
101. Pneumonia— (*a*) Lobar ...	...	75	31	75	5	
102. Pleurisy, Empyema ...	...	14	...	14	2	
105. Asthma	1	61	...	62	1	
107. Other affections of the Lungs	...	2	...	2	...	
VI.—DISEASES OF THE DIGESTIVE SYSTEM.						
108. A—Caries, Pyorrhœa, etc.	...	13	...	13	...	
B.—Stomatitis ...	...	4	...	4	...	
Glossitits ...	...	1	...	1	...	
Carried forward ...	180	3,515	323	3,695	187	

RETURN OF DISEASES AND DEATHS IN 1925, AT MALACCA HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	180	3,515	323	3,695	187	
DISEASES OF THE DISGESTIVE SYSTEM.—*Contd.*						
109. Tonsillitis ...	...	5	...	5	...	
Pharyngitis ...	...	8	...	8	...	
111. A.—Ulcer of Somach	...	44	6	44	2	
B.—Ulcer of the Duodenum ...	...	5	...	5	...	
112. Gastritis	2	31	...	33	...	
Dyspepsia	1	7	...	8	1	
113. Diarrhœa and Enteritis— Under two years ...	...	11	5	11	...	
114. Diarrhœa and enteritis— Two years and over ...	2	46	3	48	...	
Colitis	...	2	...	2	...	
115. Ankylostomiasis ...	13	140	12	153	10	
116.—(*a*) Cestoda ...	1	1	...	2	...	
Ascaris ...	...	21	...	21	1	
Dracunculus ...	...	1	...	1	...	
117. Appendicitis ...	...	8	1	8	...	
118. Hernia	...	11	...	11	...	
119. A.—Affections of the Anus, Fistula, etc.	1	15	...	16	3	
B.—Constipation ...	...	19	...	19	...	
122. Cirrhosis of the Liver	...	17	5	17	2	
124. Abscess Liver ...	2	1	...	3	...	
Hepatitis ...	...	1	...	1	...	
Cholecystitis ...	...	2	...	2	1	
Jaundice	...	6	...	6	1	
126. Peritonitis ...	...	4	3	4	...	
127. Other affections of the Digestive System ...	...	9	1	9	...	
VII.—DISEASES OF THE GENITO URINARY SYSTEM (NON-VENEREAL).						
129. Chronic Nephritis ...	4	98	22	102	8	
130. A.—Chyluria ...	...	1	...	1		
131. Other affections of the Kidneys—						
Albuminuria ...	...	2	...	2	...	
Hæmaturia ...	...	2	...	2	...	
Pyelonephritis ...	...	2	2	2	...	
Carried forward ...	206	4,035	383	4,241	216	

RETURN OF DISEASES AND DEATHS IN 1924, AT MALACCA HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	206	4,035	383	4,241	216	
DISEASES OF THE GENITO-URINARY SYSTEM.—*Contd.*						
133. Diseases of the Bladder—						
Cystitis ...	...	6	...	6	...	
Retention of Urine	...	1	...	1	...	
Incontinence of Urine	...	1	...	1	...	
Vesical Calculus ...	...	2	...	2	...	
134. Diseases of the Urethra—						
(*a*) Stricture ...	...	14	...	14	...	
(*b*) Other ...	...	3	...	3	...	
135. Diseases of the Prostate—						
Hypertrophy ...	...	6	...	6	...	
Prostatitis ...	...	1	...	1	...	
136. Diseases of the Genital Organs of man—						
Epididymitis ...	...	2	...	2	...	
Orchitis	...	8	...	8	...	
Hydrocele ...	1	6	...	7	1	
Ulcer of Penis ...	...	6	...	6	...	
138. Salpingitis ...	...	1	...	1	...	
141. B.—Other affections of the Female Genital Organs—						
Endometritis ...	...	5	...	5	...	
Retroversion Uterus ...	...	4	...	4	...	
Inversion Uterus ...	...	1	...	1	...	
Subinvolution of Uterus ...	...	1	...	1	...	
Menorrhagia ...	...	2	...	2	...	
Leucorrhœa ...	...	3	...	3	...	
Diseases of the Breast						
Mastitis	...	2	...	2	...	
Other Diseases ...	...	1	...	1	...	
VIII.—PUERPERAL STATE.						
143. A.—Normal Labour ...	2	50	...	52	4	
B.—Accidents of Pregnancy—						
(*a*) Abortion ...	...	2	...	2	...	
Carried forward ...	209	4,163	383	4,372	221	

RETURN OF DISEASES AND DEATHS IN 1925, AT MALACCA HOSPITALS.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions	Deaths.			
Brought forward ...	209	4,163	383	4,372	221	
PUERPERAL STATE.—*Contd.*						
145. Other accidents of Parturition	...	4	2	4	1	
IX.—AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.						
151. Gangrene	...	4	2	4	1	
152. Carbuncle	...	10	...	10	...	
153. Abscess	5	93	...	98	5	
Whitlow	...	5	...	5	...	
Cellulitis	7	70	6	77	8	
154. A.—Tinea	...	8	...	8	...	
B.—Scabies ...	3	88	...	91	1	
155. Other diseases of the Skin—	41	406	...	447	29	
Urticaria	...	4	...	4	...	
Eczema	1	66	...	67	5	
Herpes	...	4	...	4	...	
Elephantiasis ...	...	5	...	5	...	
X.—DISEASES OF BONES AND ORGANS OF LOCOMOTION.						
157. Diseases of Joints—Arthritis	7	83	...	90	4	
158. Other Diseases of Bones or Organs of Locomotion ...	4	39	...	43	9	
XI.—MALFORMATIONS.						
Malformation Toe ...	...	3	...	3	...	
Harelip	...	4	...	4	...	
XII.—DISEASES OF INFANCY.						
161. Premature Birth ...	...	1	1	1	...	
Carried forward ...	277	5,060	394	5,337	284	

RETURN OF DISEASES AND DEATHS IN 1925, AT MALACCA HOSPITALS.—*Concluded.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	277	5,060	394	5,337	284	
XIV.—AFFECTIONS PRODUCED BY EXTERNAL CAUSES.						
175. Food Poisoning ...	...	2	...	2	...	
176. Attacks of poisonous animals—Insect Bite ...	...	1	...	1	...	
178. Burns (by Fire) ...	...	13	2	13	1	
179. Burns (other than by Fire)	...	3	...	3	...	
182. Drowning (accidental)	...	2	...	2	...	
183. Wounds (by Firearms, war excepted) ...	...	3	...	3	...	
184. Wounds (by cutting or stabbing Instruments)	1	28	...	29	...	
185. Wounds (by Fall) ...	...	7	1	7	...	
186. Wounds (in Quarries)	...	1	...	1	...	
188. Wounds by Motor-car Accidents, etc. ...	...	7	5	7	...	
189. Injuries inflicted by Animals, Bites, Kicks, etc.	...	9	1	9	...	
198. Murder by cutting or stabbing Instruments	...	1	1	1	...	
201. A.—Dislocation ...	...	15	...	15	2	
B.—Sprain ...	...	33	...	33	1	
C.—Fracture ...	...	105	...	105	2	
202. Other external Injuries	5	199	2	204	2	
XV.—ILL-DEFINED DISEASES.						
205. A.—Diseases not already specified—Observation ...	3	236	...	239	4	
Total ...	286	5,725	406	6,011	296	

(v)—LABUAN HOSPITAL.

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.						
1. Enteric Group—						
(*a*) Typhoid Fever ...	...	2	1	2	...	
5. Malaria—						
(*a*) Tertian ...	...	5	...	5	...	
(*b*) Quartan ...	...	2	...	2	...	
(*c*) Aestivo-autumnal	1	25	1	26	...	
(*d*) Cachexia ...	...	5	1	5	1	
(*e*) Unclassified ...	1	24	...	25	...	
11. Influenza	...	2	...	2	...	
20. Leprosy	...	1	...	1	1	
31. Tuberculosis, Pulmonary	...	3	1	3	...	
38. Syphilis—					...	
(*a*) Primary ...	...	...	...	...	...	
(*b*) Secondary ...	...	3	...	3	...	
(*c*) Tertiary ...	...	7	...	7	1	
40. Gonorrhœa and its complications ...	...	3	...	3	...	
42. Other Infectious Diseases	...	...	...	...	...	
Yaws	...	4	...	4	...	
II.—GENERAL DISEASES NOT MENTIONED ABOVE.						
58. Anæmia—						
(*b*) Other Anæmias and Chlorosis ...	...	4	...	4	...	
55. Beri-beri	...	1	...	1	...	
III.—AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.						
77. Other forms of Mental Alienation ...	...	3	...	3	...	
82. B.—Neuritis ...	...	10	...	10	1	
85. Affections of the Organs of Vision—						
(*b*) Conjunctivitis ...	...	5	...	5	...	
(*c*) Trachoma ...	...	1	...	1	...	
(*e*) Other affections of the Eye ...	1	...	...	1	...	
Carried forward ...	3	110	4	113	4	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT THE CIVIL HOSPITALS, LABUAN.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	3	110	4	113	4	
IV.—AFFECTIONS OF THE CIRCULATORY SYSTEM.						
88. Acute Endocarditis and Myocarditis ...	...	1	...	1	1	
90. Other Diseases of the Heart— Type unspecified ...	...	5	3	5	...	
94. Diseases of the Lymphatic System— Lymphadenitis, Bubo (non-specific) ...	...	1	...	1	...	
V.—AFFECTIONS OF THE RESPIRATORY SYSTEM.						
97. Diseases of Nasal Passage— Coryza ...	...	1	...	1	...	
99. Bronchitis— (*a*) Acute ...	...	1	...	1	...	
(*b*) Chronic ...	...	2	...	2	...	
101. Pneumonia— (*a*) Lobar ...	...	...	...	...	...	
(*b*) Unclassified ...	...	2	1	2	...	
102. Pleurisy, Empyema ...	...	1	...	1	...	
105. Asthma	...	4	1	4	...	
VI.—DISEASES OF THE DIGESTIVE SYSTEM.						
108. A.—Diseases of the Teeth or Gums— Caries, Pyorrhœa, etc. ...	...	1	...	1	...	
B.—Other affections of Mouth— Glossitis, etc.	...	1	...	1	...	
111. A.—Ulcer of Stomach	...	1	1	1	...	
112. Other affections of Stomach— Dyspepsia, etc. ...	...	5	1	5	...	
114. Diarrhœa and Enteritis— Two years and over	...	5	1	5	...	
Carried forward ...	3	141	12	144	5	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT THE CIVIL HOSPITALS, LABUAN.—*Continued.*

DISEASES.	Remaining in Hospital at the end of 1924.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1925.	REMARKS.
		Admissions.	Deaths.			
Brought forward ...	3	141	12	144	5	
DISEASES OF THE DIGESTIVE SYSTEM.—*Contd.*						
115. Ankylostomiasis ...	1	4	...	5	...	
116. Diseases due to Intertinal Parasites—						
Ascaris	...	2	...	2	...	
119. A.—Affections of the Anus, Fistula, etc.	...	2	...	2	...	
122. Cirrhosis of Liver—						
(*a*) Alcoholic ...	...	...	...	...	...	
(*b*) Other forms ...	...	1	...	1	...	
124. Other affections of the Liver—						
Jaundice	...	2	...	2	...	
VII.—DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL).						
129. Chronic Nephritis ...	...	4	1	4	...	
134. (*a*) Stricture ...	...	2	...	2	...	
(*b*) Other ...	...	1	1	1	...	
136. Diseases (Non-Venereal) of Genital Organs of man—						
Hydrocele ...	...	1	...	1	...	
IX.—AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.						
152. Carbuncle	...	2	1	2	...	
153. Abscess	1	5	...	6	...	
Cellulitis	...	2	...	2	...	
154. B.—Scabies ...	...	3	...	3	1	
155. Other diseases of Skin—						
Erythema ...	...	1	...	1	...	
Eczema	...	2	...	2	...	
Ulcers	1	24	...	25	1	
156. Diseases of the Bone—						
Periostitis ...	...	1	...	1	...	
Carried forward ...	6	200	15	206	7	

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) IN 1925, AT THE CIVIL HOSPITALS, LABUAN.—*Concluded.*

DISEASES.	Remaining in Hospital at the end of 1923.	YEARLY TOTAL.		Total Cases Treated.	Remaining in Hospital at the end of 1924.	REMARKS
		Admissions.	Deaths.			
Brought forward ...	6	200	15	206	7	
X.—DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOSIS).						
157. Arthritis	...	1	...	1	...	
158. Other diseases of Bones or Organs of Locomotion	...	2	...	2	...	
XIII.—AFFECTIONS OF OLD AGE.						
164. Debility	...	3	2	3	...	
XIV.—AFFECTIONS PRODUCED BY EXTERNAL CAUSES.						
176. Attacks of Poisonous Animals—Insect bite ...	...	1	...	1	...	
202. Other External injuries	...	11	...	11	...	
XV.—ILL-DEFINED DISEASES.						
205. A.—Diseases not already specified or ill-defined—						
Ascites ...	...	1	...	1	...	
Pyrexia of uncertain origin	...	6	...	6	...	
B.—Malingering ...	...	1	...	1	...	
C.—Opium Addiction	...	1	...	1	...	
XVI. Diseases, the total of which have not caused 10 deaths	...	11	...	11	1	
Total ...	6	238	17	244	8	